

JPRS 83871

12 July 1983

USSR Report

TRANSPORTATION

No. 120



FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service (NTIS), Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semimonthly by the NTIS, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

Soviet books and journal articles displaying a copyright notice are reproduced and sold by NTIS with permission of the copyright agency of the Soviet Union. Permission for further reproduction must be obtained from copyright owner.

12 July 1983

USSR REPORT TRANSPORTATION

No. 120

CONTENTS

MOTOR VEHICLES AND HIGHWAYS

- Better Technical, Economic Development of Truck Transport in
Agriculture Urged
(B. Goberman, et al.; SEL'SKAYA ZHIZN', 11 May 83) 1

RAIL SYSTEMS

- Ministry Takes Steps To Lessen Spoilage of Goods in
Refrigerated Cars
(IZVESTIYA, 17 Dec 82) 5
- Rail Ministry Official on New Approaches to Plan Fulfillment
(V. Shevandin; SOTSIALISTICHESKAYA INDUSTRIYA, 30 Mar 83) 6
- Ministry Examines Shortcomings of Caucasian Railroads
(GUDOK, 15 Jan 83) 10
- Ministry Takes Steps To Improve Rail Car Servicing
(GUDOK, 16 Jan 83) 12
- Ministry Collegium Discusses Locomotive Fleet Operations
(GUDOK, 28 Jan 83) 15
- Chief Explains Problems of Sverdlovsk Railroad
(V. Skvortsov; GUDOK, 30 Jan 83) 17
- Chief Explains Problems of Krasnoyarsk Railroad
(G. Fadeyev; EKONOMICHESKAYA GAZETA, No 20, May 83) 19
- Gin'ko Tasks Station Chiefs; Chiefs Report
(V. N. Gin'ko; GUDOK, 26 Apr 83) 22
- Gin'ko on Industrial Spur Line Demurrage
(G. Gin'ko; SOTSIALISTICHESKAYA INDUSTRIYA, 3 Feb 83) ... 35

Kodar Tunnel Construction Continues on BAM Line (A. Kleva; IZVESTIYA, 1 Jan 83)	39
Climate, Geography Hamper BAM Construction (V. Chul'; GUDOK, 18 Jan 83)	40
'VL-84' Locomotive Designed for BAM Plagued by Problems (A. Valentinov; SOTSIALISTICHESKAYA INDUSTRIYA, 5 Jan 83)	42
New, Restructured Tariff System Urged (I. Buchin, et al.; GUDOK, 28 Apr 83)	46
Proliferation of Plans, Indicators Ensures Fulfillment (M. Gorbis, F. Chernetskiy; IZVESTIYA, 4 May 83)	50
Improved Gondola Car To Be Produced (O. B. Kamayev, Yu. O. Fayershteyn; ZHELEZNODOROZHNY TRANSPORT, No 12, Dec 82).....	54
Development of New 'Sandwich' Refrigerated Boxcar (M. G. Berenshteyn, et al.; ZHELEZNODOROZHNY TRANSPORT, Dec 82)	59
Rail Shipping Procedures Confound Lottery Winner (V. Vital'yev; GUDOK, 10 Mar 83)	64
Conductors Use Passenger Compartments for Storing Potatoes (T. Pigareva; GUDOK, 16 Jan 83)	66
Workers Faulted for Large Petroleum Product Losses (K. Babyev; VYSHKA, 25 Mar 83)	68
Resistance to Moscow Rail Car Repair Initiative (D. Valentinov; EKONOMICHESKAYA GAZETA, No 9, Feb 83) ..	71
Further Development of Rail Car Repair Initiative in Moscow Area (V. Gordin, B. Yakovlev; SOTSIALISTICHESKAYA INDUSTRIYA, 1 Mar 83)	73
Moscow Metro Construction Defects Noted (Yu. Grachev; GUDOK, 1 Feb 83)	76
Plans for Moscow Metro Expansion Reviewed (MOSKOVSKAYA PRAVDA, 1 May 83)	79
Lack of Rail Cars Causes Pipe Shipment Delays From Leningrad (O. Nosov, et al.; GUDOK, Mar 83)	82
Railroad Faulted for Winter Shipping Problems in Urengoy Area (V. Dubrovin; EKONOMICHESKAYA GAZETA, No 12, Mar 83) ...	84

Lagging Rail Transport Construction Delays Katek Development (G. Fadeyev; SOTSIALISTICHESKAYA INDUSTRIYA, 22 Feb 83) .	86
GUDOK Condemns Preference for Local Interests at Plan Expense (GUDOK, 26 Apr 83)	89
PORTS AND TRANSSHIPMENT CENTERS	
Briefs	
Modern Transport Complexes	93
New Moorage Operational	93
High Capacity Terminal Opened	93
Vostochnyy Automated Control System	94
Container Terminal Opened	94
Direct Rail-Ship Loading	94
River Port Under Development	95
New Bulk Cargo Moorage	95
Grain Offloading Complex Opens	95
INTERSECTOR NETWORK DEVELOPMENT	
Transsiberian Container Service Handles Millionth Container (Ye. Bogolyubov; MORSKOY FLOT, Apr 83)	96
EXPERIMENTAL SYSTEMS	
'LILO-2' Pneumatic Transport Line Construction Delays Faulted (ZARYA VOSTOKA, 12 Mar 83)	100
Industrial Association To Oversee Work in Pneumatic Container Transport (SOVETSKAYA ROSSIYA, 24 Mar 83)	102
Briefs	
Pipeline Transport Test	103

MOTOR VEHICLES AND HIGHWAYS

BETTER TECHNICAL, ECONOMIC DEVELOPMENT OF TRUCK TRANSPORT IN AGRICULTURE URGED

Moscow SEL'SKAYA ZHIZN' in Russian 11 May 83 p 2

/Article by B. Goberman, doctor of technical sciences and department head at All-Union Scientific Research Institute of Standardization in Machinery Manufacture; R. Sloma, chief of Transport Administration of USSR Goskomsel'-khoztekhnika; M. Dolgoplov, deputy chief of Main Administration for Mechanization of RSFSR Minsel'khoz; B. Alekseyev, candidate of economic sciences and senior scientific worker at All-Union Scientific Research Institute of Agricultural Mechanization: "For Those Who Administer Transport"

/Text Although agriculture has considerable transport potential at its disposal, it is by no means making the best use of it. Thus the growth in the number of motor vehicles is not being accompanied by improvements in the technical-operational and economic indicators for their use. Compared to 1970, the production costs for transport operations increased by 15-20 percent. Each year one third of the motor vehicles in a number of areas lie idle, with a portion of these machines being in good working order. In addition to great losses and a reduction in the quality of the output, great losses are being sustained owing to inefficient use of the rolling stock, poor organization of transport operations, a low level of mechanization for loading and unloading operations and unsatisfactory road conditions. Tremendous funds are also being expended for transferring motor vehicles from other branches of the national economy during the period devoted to harvesting and transporting the crops.

The increase in labor productivity and the reduction in the shortage of driver personnel in motor transport operations in agriculture are associated to a considerable degree with the increase in the average load carrying capability of the motor vehicles. It would seem that this task is being solved in particular through use of motor vehicles and motor vehicle trains produced by KamAZ /Kama Motor Vehicle Plant. However the economic effectiveness of their use in the motor vehicle pools of kolkhozes and sovkhoses is certainly open to question, since the batching of the agricultural freight and the small distances involved in intra-farm shipments preclude the possibility of operating them in a sufficiently efficient manner.

At the same time, an increase must take place in the agricultural motor pool in the proportion of small tonnage motor vehicles for small-batch shipments, motor vehicles having improved cross country capability, specialized rolling

stock and also motor vehicles with diesel engines. The use of the latter will make it possible to lower considerably the power consumption involved in agricultural transport operations.

One important feature of transport operations carried out at kolkhozes and sovkhoses lies in the fact that, together with the agricultural equipment, it participates directly in the carrying out of production technologies. Distinct from general use transport, it does not have its own economic interests. However, this important organizational-economic principle is still not personified in actual practice: technological transport operates according to the principles and methods adopted for general use motor transport. Moreover, the two principal types of technological transport in agriculture -- motor vehicle and tractor -- are actually used on a different organizational basis.

The existing methods and criteria for evaluating the production activities of motor transport enterprises and subunits, borrowed from general use motor transport, are considered to be indispensable for the rural areas. Today the production and economic interests of agricultural and motor transport enterprises do not coincide: the former are interested in the transporting of freight within the established agrotechnical periods -- by the shortest routes and with minimal expenditures -- and the latter -- in developing maximum goods turnover (in ton-kilometers) under conditions which are favorable for their realizing the greatest amount of profit. This testifies to imperfections in the methods and evaluative criteria.

At agricultural enterprises in the Russian Federation alone, the pool of motor vehicles and trailers exceeds by a factor of roughly six the number of freight rolling stock items of general use motor transport. But the latter is combined in an independent republic ministry with functional and regional main administrations and territorial transport administrations. At the same time, the entire transport service for the USSR and RSFSR ministries of agriculture is represented by small structural subunits in which the overall number of specialists scarcely exceeds one and a half dozen.

It is obvious that in order to ensure high quality transport services for the kolkhozes, sovkhoses and other enterprises of the APK /agroindustrial complex/, an engineering transport service must be created at all levels of administration. Its base could be Transsel'khoztekhnika, the state motor transport enterprises or inter-farm motor transport enterprises. Here the optimum variant must be selected based upon a production experiment and it is possible that it will not be the same for the various regions of the country.

Unfortunately, a transport service is not called for in the appropriate statutes dealing with the APK. Those who oppose its creation argue that they do not wish to inflate the administrative staff. Nevertheless, simple estimates reveal that the creation of a transport service in agriculture requires an increase in engineering-technical workers of roughly 140,000 individuals -- at the level for enterprises in a rayon -- and 8,000-10,000 individuals for the oblast (krai), republic and central levels. But efficient work by the service can bring about a reduction and release no less than one and a half to two million individuals for work in other spheres of agricultural production.

The creation of an engineering transport service in the rural areas is unthinkable in the absence of an efficient system for training cadres of highly skilled personnel or in the absence of developing and improving the level of scientific studies.

Whereas an entire network of scientific research institutes headed by NIIAT /State Scientific Research Institute of Automobile Transportation/ has been created within the motor transport system for general use, within the Minsel'khoz /Ministry of Agriculture/ and Goskomsel'khoztekhnika system there are only relatively few subunits in the structure of individual scientific research institutes. The ratio of workers in the scientific-engineering sphere to those in agricultural transport and general use motor transport is roughly 1:150. Under such a situation, there can be no discussion concerning the carrying out of serious comprehensive studies on the problems of agricultural transport.

This is why a solution should be found for the problem of a single center for the complex problems of APK transport, which ideally should be subordinated to USSR GKNT /State Committee for Science and Engineering/ and VASKhNIL /All-Union Academy of Agricultural Sciences imeni V.I. Lenin/. This does not exclude the need for organizing problem (precisely problem and not branch) laboratories in the respective VUS's, particularly at the Moscow Motor Vehicle-Highway Institute, for working out inter-branch tasks of motor vehicle transport for the agroindustrial complex.

Radical improvements are required in the work of training cadres of highly skilled specialists in the area of transport for agriculture and the agroindustrial complex. It is sufficient to note that of all of the agricultural VUZ's, the only motor vehicle transport department in the country was created comparatively only at MIISP /Moscow Institute of Agricultural Production Engineers imeni V.P. Goryachkin/. Yes and here only a small number of specialists is being trained annually. There is a lack of specialized departments and training courses for motor vehicle transport and the mechanization of loading and unloading work and warehouse operations at the Moscow Motor Vehicle-Highway Institute, the All-Union Correspondence Course Polytechnical Institute and the All-Union Agricultural Institute for Correspondence Course training.

An urgent task is also that of training specialists in this field through institutes for improving the skills of leading workers and specialists (IPK's) /Institute for the Improvement of Qualifications/. Specialized departments could become the training base for this purpose.

A certain complacent and parasitical attitude has developed among a definite portion of the agricultural leaders and specialists with regard to the problems of transport: they maintain that the state should provide assistance and assign the required number of transport vehicles for transporting the crops from other branches of the national economy and from army units. But have these comrades given any thought to how expensive this forced measure would be for the state? Indeed the transfer of just one motor vehicle costs an average of 500 rubles (and hundreds of thousands of them are being transferred annually).

A basic solution for the problem of APK transport and particularly agricultural transport as its basis will make it possible to realize economies for the state in the form of considerable funds, hundreds of thousands of units of rolling stock and large labor and fuel-energy resources. This problem has become one of the most important inter-branch national economic problems.

7026

CSO: 1829/187

RAIL SYSTEMS

MINISTRY TAKES STEPS TO LESSEN SPOILAGE OF GOODS IN REFRIGERATED CARS

Moscow IZVESTIYA in Russian 17 Dec 82 p 1

[Article entitled: "The USSR Ministry of Railways on the Article 'Why Refrigerators Are Laid Up'. Measures Have Been Taken to Speed Up the Advance of Perishable Goods"]

[Text] The USSR Ministry of Railways reviewed the materials of the joint surprise audit of the newspapers GUDOK (No 212) and IZVESTIYA (No 258/259), which pointed out shortcomings in the operation and technical maintenance of refrigerated cars. The newspapers pose the question correctly, it is indicated in the official report.

In order to speed up the advance of cars with perishable freight it is envisaged to significantly increase the number of specialized trains during 1983-1984. Perishable freight will be transported at increased speeds. In the main directions of the transportation of perishable freight it has been decided to make use of the free time-table of passenger trains for the advancement of the routes of loaded refrigerated sections, as well as to couple individual cars with the most valuable perishable freight to passenger trains. It is also planned to direct empty refrigerated cars to railways of massive loading of perishable freight, as a rule, by routes for which special tracks are allocated in a number of sorting yards.

To secure the technical readiness of the refrigerated rolling stock for the season of massive transports of the 1983 harvest, it is planned to repair thousands of cars through depot and plant-type repairs. Taking into account the experience of the past years, there will be an expansion of the practice of extending technical assistance where there will be massive loading of perishable freight. To this end, 12 shop-cars will be sent to the railways, special repair brigades have been created, mobile equipment trains have been formed, and the necessary equipment materials and spare parts have been allocated. For the equipment of refrigerated cars it is planned in 1983 to allocate immediately an additional 25 refuellers, 200 diesel generators and 200 refrigeration plants at the loading points.

Jointly with the Ministry of Heavy and Transport Machine Building, it is envisaged to create 5 additional points for the guarantee repair of sections and to manufacture 4 new shop-cars.

To secure ever-increasing volumes of transports of perishable freight, the fleet of refrigerated rolling stock will be enlarged every year by the addition of new refrigerated cars.

RAIL SYSTEMS

RAIL MINISTRY OFFICIAL ON NEW APPROACHES TO PLAN FULFILLMENT

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 30 Mar 83 p 2

[Article by V. Shevandin, chief of the main economic planning administration of the Ministry of Railways, Moscow: "The Reference Point Is the End Result"]

[Text] The decree of the CPSU Central Committee and USSR Council of Ministers entitled "On Improving the Planning and Organization of Transport of the Freight of the Economy and Passengers and Strengthening the Impact of the Economic Mechanism on Increasing the Efficiency of Operation of Transportation Enterprises and Organizations" envisages a number of significant innovations in planning the operation of the steel highways.

It is first of all a question of changing transportation's relations with freight shippers and consignees. The movement (shipment) of freight [in weight-distance terms] is from now on the most important indicator signed by the state plan. The indicator considered the leading one up to now--the volume of freight [in terms of weight only]--will not be assigned in the national economic plan.

This is a fundamental innovation. It is aimed at the end result from the standpoint of the national economy. The plan is essentially stipulating that reference figure which pertains to the interests of social production itself. All the rest is a matter of the initiative of the army of many million railroad workers.

The staff headquarters of the branch has drawn the proper conclusions from the criticism at the November (1982) Plenum of the CPSU Central Committee. The tendency has now been outlined toward adjusting smoother operation of the railroads. In recent months planning targets have been fulfilled and then some. Changes for the better indicate that there is internal potential which previously was put to poor use.

There would seem to be a point in analyzing here to what extent that potential can be activated.

In recent years rail transport has felt an acute shortage of diesel locomotives and cars. There has been an increase in the rolling stock that is "ailing," that is, in need of repair. An additional difficulty with spare parts,

the high degree of wear of the fleet of diesel locomotives, and the shortage of diesels--all of this has been having its effect. But is that all? An analysis shows that a number of repair enterprises are submitting figures which were achieved back in the midseventies. The operation of the Grebenka locomotive depot is instructive in this regard. In those years it repaired nearly twice as many diesel locomotives as today. Yet today the diesel has appreciably larger capabilities.

The new conditions for planning and the stronger influence of the economic mechanism toward increasing transportation's efficiency of operation make it possible to better stimulate the initiative and occupational potential of every participant in the transportation conveyor.

It cannot be assumed, however, that transportation's potential should be sought in one direction--in increasing the volume of traffic. However paradoxical it may sound today, there is still a need to find opportunities for reducing the movement of freight. There is no gain from an uncontrolled growth of the volume of traffic, nor can there be. It can only be a question of that work which is necessary and efficient from the standpoint of the social division of labor, production specialization and industrial cooperation.

About 100 railroad stations and yards receiving logs consigned to enterprises they serve are at the same time shipping out that same round timber to various parts of the country. Sometimes we carry coal by such complicated routes that it is difficult to understand their logic. Products may roll from one end of the country to the other and back to be fitted out. For example, rice-harvesting combines are carried on rail flatcars from Krasnoyarsk to Birobidzhan, are furnished there with tracks, and then are sent back via Krasnoyarsk to the rice fields of the Kuban and Central Asia.

It is even difficult to say how much such shipments cost the national economy. Specialists cite various figures--from 3 to 5 percent of the value of the total volume of freight-carrying operations by the steel highways goes for hauls which do not make sense. But even this most modest estimate is only 1 billion rubles of money thrown away. After all, we should also take into account that this traffic puts an additional strain on the railroads and is a reason why the movement of really urgent freight is delayed.

A fundamental solution to the problem now exists. From the beginning of next year union main administrations for supply and sales [soyuzglavsnabsbyt] of USSR Gosnab, which reimburse the shipping expenses of shippers at prices for the station of destination, are to monitor and calculate the volume of such costs. Appropriate financial incentives are envisaged for material and technical supply components for reduction of these costs. And from the beginning of 1985 the recording and planning of shipping costs for the national economy as a whole become obligatory for all relevant ministries and departments.

Reduction of shipping costs is, of course, to no small degree a problem of us transportation workers as well. Thanks to optimum economic management, thrift, and selection of the most effective lines in their production strategy the collectives of railroad administrations and divisions could reduce the

volume of operating costs in transportation work. Unfortunately, not everything along those lines is in the hands of railroad workers.

In recent years electronics and up-to-date methods of mathematical economics have been used more and more actively in planning the operation of the branch. We are striving so that operational planning of the operation of the railroads--by the month, the 10-day period and even the day--is closely linked to the branch's state assignments, so that in these plans themselves provision is made for ways and methods of reducing operating costs. But we cannot make up the transportation plan, but rather compile it on the basis of the declarations of our partners--freight shippers. Yet those declarations are not specific at all; precise calculations cannot be based on them.

More than 20 years ago a decision was made not to indicate the actual stations of destination of future shipments, but to indicate only the name of the railroad, in connection with the constant growth of the volume of operation of transportation and the impossibility of detailed planning of the volume of operation over the short run. Abbreviating the initial information made sense at that time: it was possible to systematize the figures in drawing up the plans and to speed up the planning process itself. Otherwise the target would have reached the railroads after the event, they would have missed the beginning of the month being planned by several days.

Now there is no such problem. Computers can calculate all the economic information in a matter of minutes which previously, by the "hand" method, took several days. But there has been no success in reinstating the initial finite information--the shipment's station of destination. For several years there have literally been battles between the MPS [Ministry of Railways] and planning and supply organizations, but no results. USSR Gossnab, for example, considered entering the station of destination information which is excessive and overloads the shipper's declaration. And it is not budging from that. Yet we cannot command the computer to calculate optimum plans on the basis of information which mentions only a certain address out of Chekhov--"to grandpa in the village."

Economically sound distribution of traffic among the branches of transportation is closely related to the problem of improving the planning of the operation of transportation. I will take the numerous short-haul rail shipments. Even if the freight is delivered to the freight car by truck, it is still more advantageous to the owner to have it carried by rail, even if transshipment is involved, even if it takes much longer, over a distance of tens of kilometers than by truck. It is economically more advantageous. The freight rates promote this: rail rates are a fraction of trucking rates.

The most curious thing is that sometimes it is economically more advantageous for the truckers to make long hauls in all directions than short ones. For that reason they do everything by hook or by crook to have hauls included in their plans over distances of many hundreds and even thousands of kilometers, but they do everything to avoid short runs.

Together with the interested departments the MPS is now drafting new rate schedules. The reason for this is that the revision of wholesale prices of industrial products which took place last year has brought about a substantial drop in the profitability of our branch: operating expenses have risen, but their reimbursement has remained at the previous level because rates were not changed. When the new prices are set on transport service, there needs to be a more thorough differentiation between short hauls (up to 50-200 km) and other traffic. Specialists have been well aware for a long time that the present rate schedules for short hauls do not even cover the cost of such hauls. This step will also be fully in line with solving the problem of economically sound distribution of traffic among the branches of transportation.

7045

CSO: 1829/218

RAIL SYSTEMS

MINISTRY EXAMINES SHORTCOMINGS OF CAUCASIAN RAILROADS

Moscow GUDOK in Russian 15 Jan 83 p 1

[Unattributed article: "In the Collegium of the Ministry of Railways. Speed Shipments on the Railroads of the Caucasus"]

[Text] On 13 January the collegium of the Ministry of Railways examined the situation of freight shipments on the Azerbaijan, Transcaucasian, and North Caucasus railroads. Comrades Kengerli, Vardosanidze, and Kotlyarenko, the chiefs of these railroads, gave their reports. It was noted that despite substantial strengthening of the railroads' technical equipment level, for some time now freight car movement has been slowed and targets with respect to freight shipments and utilization of rolling stock have not been met.

In the last few years 1.1 billion rubles have been invested in the development of the three railroads' material-technical base. About 400 kilometers of new lines have been built, 852 kilometers have been converted to electrical traction, and almost 1,300 kilometers have been equipped with automatic blocking and central dispatching. New classification stations have been built at Shirvan and Krasnodar. The locomotive fleet has been enlarged and renovated.

The officials of these railroads, especially the Azerbaijan and Transcaucasian, have not undertaken effective measures to make better use of fixed capital and new facilities, to improve operational work, and strengthen production and technological discipline.

Amounts of traffic and transfer of cars to interchange points between these railroads in the past year not only failed to increase but even decreased. Reception of trains has been especially unsatisfactory on the Azerbaijan system (Samur station) and the Transcaucasian (Veseloye). All three systems have accumulated a big surplus of cars. Large numbers of cars are standing idle on the near and far approaches to the region.

An extremely unsatisfactory situation has developed on the Azerbaijan system, where serious oversights have been made in planning train and freight operations and dispatcher control of train traffic, schedules are badly disrupted, and locomotives, cars, and other technical equipment are poorly utilized and maintained. Safety is in a sorry state. Difficult situations have developed because of unsatisfactory organization of the stations' operations.

Things are not going very well on the Transcaucasian system either. Its officials have failed to learn from their failures in previous years. Both

the facilities and the cadres have proved to be unprepared to handle the freight volume. The most important performance indicator--freight car turnaround time--was slowed down last year. The system of scheduled preventive maintenance of electric locomotives has broken down, adversely affecting their technical condition.

Freight off-loading is very poorly organized on the Transcaucasian and Azerbaijan systems. Local freight is not delivered on time. Precise coordination with the clientele is lacking. Freight-handling operations decline sharply during the nighttime and on weekends. Amounts of inefficient shipments are too high in the region.

Cargo protection is in a very sorry state on all three railroads. Prophylactic measures to prevent pilferage of material goods, spoilage, and loss during haulage have been inadequate. Trains carrying valuable freight are frequently left unguarded at intermediate stations.

Last year all three railroads not only failed to achieve the targeted rise in labor productivity but also allowed it to decline. Work time losses are high due to absenteeism, tardiness, and idleness. Operating capital and the wage fund have been overspent.

The collegium noted that many shortcomings are due primarily to the unsatisfactory selection, assignment, and training of cadres. Standards imposed on command personnel have also been slack. The necessary reserve of engineering-technical personnel for promotion has not been built up.

Since the November 1982 CPSU Central Committee Plenum, officials of the Azerbaijan, Transcaucasian, and North Caucasus railroads have failed to restructure their work style and methods and have not undertaken effective measures to implement the 13 December 1982 decree of the collegium of the Ministry of Railways.

In their resolution, the collegium of the Ministry of Railways mapped out a number of additional organizational-technical measures designed to change the operational situation in the region as rapidly as possible, to make maximum use of reserves to speed up freight shipments, and improve transport services of the economies of the republics of the Transcaucasus, the autonomous republics, krais, and oblasts of the North Caucasus.

It was deemed essential to strengthen the cadres of the management link of the commanders of the railroads of the Transcaucasus. Brigades of specialists and skilled personnel are being sent to the Azerbaijan railroad to provide practical aid in perfecting the organization and work technology of the crucial enterprises.

Implementation of these measures and painstaking educational work in the collectives to strengthen discipline, enhance responsibility, and improve the style and methods of the work will make it possible to overcome the lag in a short time and ensure unconditional fulfillment of plan targets.

RAIL SYSTEMS

MINISTRY TAKES STEPS TO IMPROVE RAIL CAR SERVICING

Moscow GUDOK in Russian 16 Jan 83 p 1

[Unattributed article: "Ministry Collegium Takes Steps. On the Basis of Car Inspector's Signal"]

[Text] The collegium of the Ministry of Railways discussed the matter of measures designed to eliminate shortcomings in the organization of rail car servicing that were discussed in the article "How Malfunctions Come About," published in this newspaper on 24 December 1982.

The collegium acknowledged that attention is being paid to raising the level of operational work in the car depot and the station at Cheremkhovo (Irkutsk Department) and the Eastern Siberian Railroad as a whole.

At the same time, as was correctly noted in the article, the technical maintenance station at Cheremkhovo and in other enterprises of the Irkutsk Department still suffer from substantial shortcomings in the organization of car servicing, and these slow down train traffic and disrupt safety. Frequently because of oversights in the organization of labor and unsatisfactory supplies of spare parts to the maintenance stations as well as a shortage of machinery and tools (also poor maintenance of them), deviations from proper car inspection are committed. In 1982, car handling personnel in the Irkutsk Department allowed the number of malfunctions in train operation to rise, also the number of train delays and disruptions in dispatching them from the stations. There have been serious shortcomings in personnel instruction and training as well as providing proper working and living conditions for personnel of the technical maintenance stations at Cheremkhovo and the Irkutsk classification yard. Cadre turnover is high, along with violations of labor discipline.

The collegium also noted that similar shortcomings in the operations of technical maintenance stations exist on other railroads as well. This results in slowed train traffic and delayed car deliveries as well as lower-quality operations work on the network as a whole.

Because of poor preparation of journal boxes there were 66 breakdowns of car axle necks in 1982 on the Oktyabr'skaya, Gor'kiy, Kuybyshev, Tselina, Alma-Ata, and Western Siberian railroads alone. This caused considerable disruptions in train traffic.

The work performance of the car servicing stations also declined last year in the crucial classification yards at Yudino, Oktyabr'sk, Karaganda, Arys', Perm', Inskaya, Moskovka, Chita, and a number of others which increased the number of uncouplings from formed trains as well as delayed train dispatching. Because of violations in technical maintenance procedures, train idleness in the dispatching yards of Smychka, Vkhodnaya, Gor'kiy-classification, Lyangasovo, Karaganda, Zaporozh'ye-Levoye, and Bataysk exceeds stipulated norms by a factor of 2 or 3.

Unsatisfactory preparation of consists for sorting in the arrival yards has substantially slowed the tempo of reforming operations at Zhmerinka, Debal'tsevo-classification, Kupyansk, Bataysk, and Volnovakha.

Comrade Tsintsadze, chief of the Eastern Siberian Railroad, and Comrade Komarov, chief of the Irkutsk Department, have been instructed to take immediate steps to eliminate shortcomings in the work of the car servicing stations and ensure timely and safe train movement, compliance with traffic schedules, and improved operational quality, also to improve the level of material-technical support, strengthen the repairs base, and take care of cadre problems in car handling enterprises.

Within a month's time the chiefs of railroads and departments are to make a detailed inspection of the work organization of the technical maintenance stations, especially those located on the most important lines and in the crucial classification yards, also to work out and implement measures to radically improve the performance of the maintenance stations. In addition, they must focus attention on strict compliance with technological procedures of inspection and repairs of cars in trains, painstaking investigation of train stoppages on the basis of PONAB [expansion unknown] instrument readings in order to take effective measures to eliminate train delays due to journal box overheating, and the creation of an unreducible technological reserve of materials and spare parts for car repairs in the technical maintenance stations.

Personal responsibility for the condition of the maintenance stations' technical facilities rests on the chief engineers of the car depots, who must broadly introduce systems for mechanizing production processes and monitor the proper maintenance of equipment, mobile repair units, and other technical facilities.

The resolution adopted by the collegium of the Ministry of Railways points out the necessity of comprehensively adopting the experience of mechanizing production processes in Kurgan's technical maintenance station, the work methods used by Senior Car Inspector Comrade Batin to detect irregularities in the preparation of journal boxes, technical car maintenance methods using PONAB instruments, developed by the collective of the Georgiu-Dezh technical maintenance station, and also advances made by other leading collectives and innovators in production.

Personnel of the technical maintenance stations must be provided with working conditions which ensure timely and high-quality train preparation. Technical

car maintenance station staffs must be manned in accordance with the amount of work to be done, banning the practice of putting maintenance personnel to work not connected with car inspection and repairs.

The collegium's resolution emphasizes that special attention must be focused on strengthening labor and technological discipline, enhancing the personnel's responsibility for their assigned tasks, improving the effectiveness of socialist competition among maintenance collectives, and also improving material and moral incentives for car inspectors and mechanics responsible for safe and uninterrupted train traffic.

6854

CSO: 1829/226

RAIL SYSTEMS

MINISTRY COLLEGIUM DISCUSSES LOCOMOTIVE FLEET OPERATIONS

Moscow GUDOK in Russian 28 Jan 83 p 1

[Unattributed article: "Locomotives Must Operate Reliably! Expanded Meeting of the Collegium of the Ministry of Railways"]

[Text] An expanded meeting of the collegium of the Ministry of Railways was held on 26-27 January, participated in by deputy chiefs of railroads, personnel in charge of locomotive operations, and managers of services, departments, and main locomotive depots. They discussed ways to radically improve the organization of repairing and operating the locomotive fleet in light of the tasks outlined in CPSU Central Committee General Secretary Comrade Yu. V. Andropov's speech at the November 1982 CPSU Central Committee Plenum.

The report was delivered by B. D. Nikiforov, deputy minister of railways.

Also speaking at the meeting were F. I. Shuleshko, first deputy minister of railways, A. T. Golovatyy, deputy minister and chief of the Main Administration for Rolling Stock Repairs and Spare Parts Production, G. M. Korenko, deputy minister and chief of the Main Administration for Material-Technical Supply, N. N. Lavrent'yev, secretary of the trade union central committee, Yu. I. Zhitinev, deputy chief of the Moscow Railroad, V. K. Davydov, deputy chief of the Central Asian Railroad, P. I. Kel'peris, chief of the Main Administration of Locomotive Operations, A. N. Bevzenko, first deputy chief of the Main Technical Administration, A. D. Ivanov, deputy chief of the Main Administration of Traffic, V. N. Nikitin, chief of the locomotive service of the Volga Railroad, V. M. Slosman, chief of the Kurgan Department, N. I. Khmelevskiy, chief of the locomotive operations division of the Bashkir Department of the Kuybyshev Railroad, V. V. Tolstov, chief of the Mogoch Locomotive Depot (Transbaykal Railroad), V. A. Ganzin, chief of the Gomel' Locomotive Depot (Belorussian), V. M. Khazanskiy, chief of the Bugul'ma Locomotive Depot (Kuybyshev), A. S. Semenov, chief of the Murom Locomotive Depot (Gor'kiy), A. F. Lukin, chief of the Kurgan Locomotive Depot (Southern Urals), K. V. Sadykov, chief of the Ashkhabad Locomotive Depot (Central Asian), Yu. P. Klyukin, chief of the Tyumen' Locomotive Depot (Sverdlovsk), Yu. D. Tsvylev, chief of the Sol'vychevodsk Locomotive Depot (Northern), B. P. Voznyuk, chief of the Kiev-passenger Locomotive Depot (Southwestern), N. N. Larshin, chief of the Ayaguz Locomotive Depot (Alma-Ata), S. N. Beletskiy, chief of the Krasnyy Liman Locomotive Depot (Donetsk), V. I. Sergeyev, editor in chief of ELEKTRICHESKAYA I TEPLOVOZNAYA TAYGA, and P. G. Muratov, a staff member of the All-Union Correspondence Institute of Railroad Transport Engineers.

USSR Gosplan Deputy Chairman V. Ye. Biryukov discussed the main causes of the unsatisfactory work of the locomotive services.

Railways Minister N. S. Konarev spoke at the meeting.

The work of the collegium was participated in by officials of the CPSU Central Committee, the USSR Council of Ministers, USSR Gosplan, USSR Peoples Control Committee, the USSR Prokuratura, and the trade union central committee.

(854

CSO: 1829/226

RAIL SYSTEMS

CHIEF EXPLAINS PROBLEMS OF SVERDLOVSK RAILROAD

Moscow GUDOK in Russian 30 Jan 83 p 2

["Round Table" discussion between V. Skvortsov, chief of the Sverdlovsk Railroad, and GUDOK in the administration of the Sverdlovsk Railroad: "Task Number One"; date and place not given]

[Text] The strengthening of order and the increase in the responsibility of everyone for the work entrusted to him, regardless of the sector of production in which he works, is a most important reserve for increasing the efficiency and quality of all our work.

How can this reserve be better utilized? How can an end be put more quickly to cases of irresponsibility, lack of organization, mismanagement and drunkenness? This was the subject of a frank and concerned "round table" discussion of GUDOK in the administration of the Sverdlovsk Railroad. Veterans of labor and young railroad workers, party, trade union and Komsomol workers, and the directors of the services of the departments and enterprises of the trunk line.

To begin I will cite a few figures. The number of truants on our Sverdlovsk Railroad per 1000 workers decreased from 85 in 1979 to 68 in 1981 and 62 in 1982. The losses due to truancy were reduced threefold and the labor turnover diminished from 15.6 to 13 percent. What caused this definite progress? The fact is that a complex of special organizational and technical measures has been developed and realized in connection with the decree of the CPSU Central Committee, the USSR Council of Ministers and the AUCCTU "On the Further Strengthening of Labor Discipline and the Reduction of Labor Turnover in the National Economy" and the decree of the CPSU Central Committee "On Measures to Improve Party and Political Work on the Railroad". There has been a noticeable increase in the educational role of many leaders, public organs and trade union activists. During the past year alone, more than 3,600 violators of discipline and the public order were called to account before the comrades' court. The unworthy conduct of more than 2,500 people was discussed at meetings. Significant work is being done by the tutors, of which we have more than 7,500. This has a positive effect on the strengthening of discipline and the introduction of progressive forms of labor organization. Already about 400 integrated and specialized brigades with payment according to the coefficient of labor participation have been organized in the enterprises of the trunk line. During the current year their number will double.

It goes without saying that what has been achieved must be regarded merely as first and for the time being still modest steps. We still have many shortcomings. During the past year alone, losses due to truancy amounted to 16,500 man-days.

The low level of discipline in a number of enterprises has a negative effect on the maintenance of technical facilities. During the past year, for example, mechanisms of the power supply system went out of operation more than 5,000 times. Four hundred and fifty cases of locomotive damage in the path of movement were registered and more than 9,000 stops for repairs not provided for in the plan. In other words, everyday 25 electric locomotives and diesel locomotives were kept away from work. Because of disrepairs, 7,500 railroad cars had to be uncoupled from trains. As a result of various violations of discipline, drunkenness, and absences, more than 1,000 people day after day practically did not take part in production.

Think about these facts. If we get rid of the loafers, bad workers, and idlers and reduce the waste of time to zero, then, in my view, it is completely practical to increase labor productivity substantially without additional capital expenditures. One can argue about figures, of course. But one thing is clear: We have a great reserve for increasing the efficiency and quality of work, which we must bring into operation. What is necessary for this? To bring order in every enterprise, every section, and every job. And how can this best be done--let us exchange views. Let us talk openly. About painful problems, about useful experience, and about miscalculations, so as not to allow them in the future. Together it is easier to develop measures which help to raise discipline to the level of today's requirements. And that for us is task number one.

8970

CSO: 1829/225

RAIL SYSTEMS

CHIEF EXPLAINS PROBLEMS OF KRASNOYARSK RAILROAD

Moscow EKONOMICHESKAYA GAZETA in Russian No 20, May 83 p 19

[Article by G. Fadeyev, chief of the Krasnoyarsk Railway: "The Trunk Line and the Enterprises"]

[Text] The Krasnoyarsk Railway is part of the Transsiberian Railroad. On railroad maps its name appeared 4 years ago. The first two years of the independent existence of our railway were very difficult. Its boundaries had to be changed since they were defined without the necessary calculation. It was possible to eliminate the reasons for the hold-up of the normal advancement of the railway car flow. During the two years of the five-year-plan, our collective fulfilled the plan for the general shipment of freight. The turnover of cars accelerated by 12 hours.

The work of the Krasnoyarsk Trunk Line is characterized by the predominance of loading over unloading. Coal accounts for one-third of the freight shipped. We try to send empties evenly to the strip mines, where the fuel from the coal-face is loaded at once into the cars.

Exclusive circle routes are conducive to greater rhythmical pace in the supply of coal to consumers, as well as of other types of fuel and raw material. The necessary quantity of rolling stock has been formed, their turnover time has been determined, a system of control of their movement, loading and unloading has been developed and introduced. The rolling stock is being moved in accordance with special schedules at increased speeds.

The circle routes are a good thing. But they ply not only within the boundaries of the Krasnoyarsk Trunk Line but also in other railroads. There, naturally, we are not able to control their movement. At times the following also happens: The routes "disappear", they are disbanded.

In our view, in the interest of the high efficiency of the operation and safety of the circular routes, a special control on the part of the Ministry of Railways must be established.

Together with the shippers and receivers of freight, the Krasnoyarsk railroad workers try to utilize the freight-carrying capacity of the cars to the maximum degree. To this end, about 30 schemes for efficient loading have been developed on the railway and 55 local technical norms are being used. In parti-

cular, the efficient loading of panels of wooden houses has been mastered. As a result, the load per car increased by 9.2 tons.

For the railroad as a whole, the rational loading of the cars makes it possible to transport more than a million tons of freight without bringing in additional rolling stock.

During the current year the railway began to work somewhat better. However, our activity still includes many shortcomings.

During the past year, we secured a sufficiently high level of freight shipment, but, no matter how paradoxical this is, we failed to cope with the task in regard to freight turnover. The fact showed that three-fourths of the total volume of freight turnover are accounted for by transit transports. It did not prove possible to secure the planned growth in labor productivity. What is the matter?

The annual plans of the railroads, including the Krasnoyarsk Railway, are formed on the basis of orders of the ministry and department consigners. They do not bear any economic responsibility for their orders. Further, monthly plans come into operation. And here frequently the consigners do not confirm the orders sent earlier. Thus, during the past year, the enterprises of non-ferrous metallurgy, the oil-processing industry and a number of others "let us down". The sum of the monthly plans did not coincide with the annual plan by 800,000 tons. In the course of realizing the decree of the CPSU Central Committee and the USSR Council of Ministers on the improvement of the economic mechanism in transportation, the system of planning will change for the better.

An important reserve of transportation is the coordination of the activity of the railway workers and workers in related jobs. Three-fourths of the entire loading work is carried out on the access railways adjacent to the Krasnoyarsk Railway. Of interest is the experience of the coal-loading yard Zaozernaya at the Irsha-Borodinskiy coal strip mine. Here, thanks to the coordinated work of the participants of the transportation conveyer, the norms of idle-time are constantly observed, the coal is unloaded without hitches.

Active cooperation has been organized between the collectives of the Achinsk-II Station and the alumina combine, as well as between the Kuragino Station and the local iron mine. However, these examples, as it is said, do not yet make a difference. The majority of industrial enterprises which have their access railways exceed the established norms for idle-time. For this reason, every 24 hours more than 400 cars are excluded from useful work.

The introduction of production capacities in the presence of the incomplete construction of railway transportation contradicts the goals of integrated building. Seven years ago, for example, the first phase of the Krasnoyarsk Trailer Plant was delivered. But thus far only less than 10 percent of the estimated cost have been spent for the creation of the railway system. A similar situation exists at the Kansk Plant for Light Metalwork.

What the underestimation of the development of transportation leads to is apparent from the example of the Sharypovo Station. The construction of the Kuyby-

Shev Automobile and Tractor Electrical Equipment and Carburetor Plant gathers speed, the flow of freight is increasing, but the work on the expansion of the station is completed only to the extent of one-third. For this reason it has become urgently necessary to include the construction of access railways as an integral part among the priority complexes of the industrial enterprises.

8970

CSO: 1829/225

RAIL SYSTEMS

GIN'KO TASKS STATION CHIEFS; CHIEFS REPORT

Moscow GUDOK in Russian 26 Apr 83 p 2

[Report delivered by V. N. Gin'ko, first deputy minister of railways, and reports by station chiefs delivered in an expanded session of the collegium of the Ministry of Railways: "Strengthen Discipline, Step Up the Pace and Shorten the Standing Time of Railroad Cars"; passages enclosed in slantlines printed in boldface]

[Text] [Gin'ko Speech]

The performance of rail transport was subjected to severe and just criticism at the November (1982) Plenum of the CPSU Central Committee. The plenum's decisions have brought about an upsurge of work effort by railroad personnel and have given a powerful impetus for increasing the responsibility of key officials and for changing the style and methods of management.

The expanded meeting of the collegium of the MPS [Ministry of Railways] on 13 December outlined measures to carry out the decisions of the November (1982) Plenum of the CPSU Central Committee and instructions of Yu. V. Andropov, general secretary of the CPSU Central Committee. Performance of the measures to improve the operational activity of the railroad, to increase the operating reliability of equipment, to strengthen discipline, to tighten responsibility at all levels of management are having a constructive effect toward fulfilling the traffic plan and meeting targets for quality and economic performance.

But the results achieved should not make us content, since the requirements advanced at the November Plenum of the CPSU Central Committee and those decisions which were adopted in the expanded collegium of the MPS have not been altogether carried out as yet.

In the second quarter we have to ensure a maximum effort in carrying traffic--loading and delivering 45 million tons more than in the first quarter, and that while the summer track repair work is being done. The traffic plan, which reflects the needs of the economy, must unfailingly be fulfilled. That is the main thing. Success in fulfilling it is decided first of all at stations.

We must be seriously concerned with improving the performance of all stations--classification yards, freight yards, and medium-size stations--and to achieve faster turnaround time of cars by reducing their standing time at stations and by eliminating delays when trains are not accommodated.

Switchyards have a most important role to play in the performance of the railroads. Every day they handle about a million cars. Reduction of the standing time of those cars by just 0.1 hour makes it possible to increase the average daily volume of loading by approximately 1,600 cars. However, beginning in 1976 the time cars spend in switchyards has been increasing steadily. In 6 years it has risen 0.91 hour, mainly because of through cars requiring switching. Only 38 of the 100 crucial yards making up unit trains last year stayed within the assigned allowance for standing time of through cars requiring switching. A very large number of trains were held up at approaches because junctions could not accommodate them, which caused irrecoverable losses in utilization not only of cars, but also of train locomotives. Last year the most important classification yards alone held up 276,000 trains nearly 466,000 hours because they could not accommodate them.

/The Ministry of Railways assigns station and yard personnel the task of seeing that the standing time of through cars requiring switching be reduced by at least 3 percent in 1983 and that of through cars not requiring switching by 5 percent./

It is above all necessary to increase the amount of car switching done on humps, in order to eliminate the delay of trains at approaches, to see that the humps achieve the output that corresponds to the plan for making up trains and the traffic plan.

/The Ministry of Railways assigns personnel of classification yards the task of increasing the switching of cars on humps by at least 4 percent./

The level of station and yard performance is determined by the effectiveness of day-to-day planning. Information on the approach and disposition of trains is the basis of planning. The reliability of the plans drawn up and their performance depend entirely on the completeness, timeliness and quality of that information. But a very great many managers of stations, departments and traffic departments do not attribute due importance to the supply of quality information as the basis for carrying out the technological operations of yards and stations. That is why the plans are not reliable enough.

First attention should be paid to improving the planning of dispatching trains from the yard in 4-hour periods with commitment of locomotives and locomotive crews. There is also a need to enhance the accountability of personnel of all services for performance of the plan for dispatching trains on schedule.

Electronic computers now have a solid place in station and yard technology. Automatic control systems [ASU's] are in operation at 35 yards and stations, and by the end of the 5-year period ASU's are to be introduced at another 30. Computers take over the solving of many problems, considerably reduce the share of low-productivity manual labor, and help to raise the level of management of the yard's or station's operation.

The experience of the work force of the station Orekhovo-Zuyevo on the Moscow Railroad, which has been approved by the MPS collegium, deserves to be thoroughly studied in this regard and to be disseminated in every way. ASU's are being used effectively at the stations Chelyabinsk-Main, Perm-classification yard, Darnitsa, Minsk-freight and a number of others. Valuable experience has been gained on the Belorussian Railroad.

But everyone is aware that no automatic system and no computer can bring an appreciable benefit if the initial data do not meet the requirements imposed, if the information on car flows is of low quality or is not punctually transmitted.

It is very important in improving operating technology and the performance of stations to disseminate in every way and apply advanced know-how. At our stations and yards there are quite a few valuable initiatives, many of which have been generally acknowledged. But it is clear that too little attention is being paid to dissemination of progressive know-how. The network schools of progressive know-how annually held by the main traffic administration are useful without question, but this is not enough. Many engineering and technical personnel of yards and stations are not at present making a regular study of the periodicals published by TsNIITEI [Central Scientific Research Institute for Information, Feasibility Studies and Popularization of Rail Transport of USSR MPS], separate publications and articles in our press. That is why many efforts are sometimes devoted to exploring something that has long ago been developed and put to successful use in other collectives.

The speaker then dwelled on the organization of car flows, spoke about low discipline and adherence to the plan for making up trains and the procedure for routing car flows, which is having a disruptive effect in operation.

Last year classification yards dispatched 23,200 trains in which there were breaches of the makeup plan, 3,100 more than in the previous year. Moreover, many breaches of the makeup plan were committed with the tacit consent, and sometimes even under direct instructions of the managing officials of the railroads and divisions, especially on the Azerbaijan, Transcaucasian, South Urals and North Caucasus Railroads.

The defective practice of additional loading of network classification yards with assignments in the makeup plan has become part of a system on certain railroads. Thus through the efforts of the management of the Odessa Railroad one of the most important classification yards of the network--the Odessa classification yard--has been turned into a yard of local significance. Of the 40 classification tracks at Khabarovsk-2 only 6 have been allocated to interroad use, Chita-1 and Karymskiy have allocated only 2 tracks apiece to through trains, half of the hump classification tracks at the stations Gorkiy-classification yard, Yudino, Chelyabinsk-Main, Irkutsk-classification yard, and Ulan-Ude are taken up by local traffic.

In a specific instruction dated 25 February of this year the Ministry of Railways prohibited the establishment of additional makeup of intraroad trains at classification yards of network importance and alteration of the intraroad

makeup plan for other yards if this affects the organization of interroad car flows.

It is time to resolutely condemn and eradicate the localistic approach to movement of the flow. The most important classification yards have a responsibility to first solve the problem of moving the car flow on routes; they must work for the network, and they should not be involved in selection of cars in the yards of freight stations of their divisions.

Serious worry is still being caused by violation of the procedure for routing of car flows. The Volga and Southeastern Railroads are particularly bad in this regard.

After analyzing the performance of section stations, the speaker then discussed freight stations. In recent years, in spite of their development and improved equipment, and the higher level of mechanization of freight-handling operations, the standing time of cars at them has not changed essentially. In 1979 it was 24.5 hours, in 1982--24.42 hours. Of the 100 most important freight stations only 44 stayed within the allowed standing time.

Managers of freight stations can and should exert a vigorous influence on the organization of work with cars at industrial enterprises. Last year the standing time of cars on spur tracks was 0.08 hour higher than the allowance, which brought about a loss of loading capability in the amount of 832,500 cars. This indicates that on a number of roads sufficient attention is not being paid to the operation of spur lines and dissemination of the Lvov method.

At a number of stations due attention is not being paid to such an important untapped potential as fuller use of car load capacity and size. Last year the static car load dropped on 15 roads, especially the Alma-Ata, Southwestern, Southern, Donetsk, Volga and South Urals Railroads.

/The Ministry of Railways sets freight station masters the task--of achieving in 1983 a reduction of the standing time of cars during freight-handling operations by at least 3 percent and increasing the static load by at least 100 kg./

Having discussed the organization of passenger traffic and problems concerning train traffic safety and workplace health and safety, the speaker paid particular attention to ensuring the preservation of freight during shipment. Wherever guarding state property is a subject of constant attention and concern by station managers, the results are evident. Take, for example, the station Kharkov-Balashovskiy on the Southern Railroad. Over the last 15 years it has completely safeguarded the preservation of freight in shipment. For many years the Moscow-Riga station has also operated without losses.

Wherever the supervisory personnel of stations consider preservation of freight to be a secondary matter, wherever this work is a formality, wherever a sense of conscious responsibility and involvement of everyone in preserving the people's property has not been instilled, the picture is different. For example, last year at the station Kokchetav (station master S. N. Gnedin)

losses occurred in the amount of 137,500 rubles, and at Novyy Port (Ye. S. Sopov) 312,700 rubles.

The increased number of cases of freight theft by station personnel is causing particular alarm. It is a dangerous matter for certain station masters to take a lenient attitude toward petty thefts.

The level of technological discipline of station personnel, above all operators of technical offices, has great importance in guaranteeing preservation of freight. Every separation of cars from documents should be regarded as defective work and should be evaluated accordingly. In 1982 the number of separations of cars from documents exceeded 16,000. We have to note that these report data do not fully reflect the true picture by any means. A large number of separations on the basis of carrier's reply to claim are not recorded, and often the chiefs of technical offices and station masters cover those responsible. This lack of principle on the part of supervisory personnel endangers irresponsibility on the part of operatives and detracts from technological discipline.

The unsatisfactory organization of tracing work is highly detrimental. The managers of certain yards and stations are not cognizant of their responsibility for establishing the ownership of cars without documents, and for that reason some of them stand idle for a lengthy time, which both results in spoilage of the freight and also encourages theft. For instance, at the station Salyany on the Azerbaijan Railroad a boxcar containing equipment stood for 1 year and 4 months before the personnel of the station got around to wiring a tracer. Cars have stood for more than a year without documents at the stations Tbilisi-classification yard, Karaganda-classification yard, Gudermes and others.

Comrade Gin'ko then spoke about the role and responsibility of key officials of railroads, traffic departments and divisions in improving the operation of yards and stations. Extremely little attention is being paid on the railroads to such a very important question as maintaining profiles of humps and hump classification tracks. Even that minimum amount of work which was assigned by the main track administration is not being done. Profiles which do not correspond to the design are greatly slowing down the breaking up of trains and are causing numerous cases of breakage and damage to rolling stock.

Key officials of railroads and divisions are little concerned about the organization of steady operation of points for the technical servicing of cars, which at a number of yards and stations have become a real hindrance to operations. At more than 50 percent of the stations the car personnel are not meeting the technological standard for processing trains. The quality of maintenance is dropping year after year, and consequently technically unfit cars are coming uncoupled from complete trains on a large scale. At only the most important classification yards last year more than 100,000 of them came uncoupled.

The problems of further development of yards and stations and of material and technical supply are also often remaining outside the field of vision of key

officials of roads and divisions. This is confirmed by the fact that centralized capital investments planned for 1982 were assimilated at a level of only 78.6 percent.

Thousands of people work at our yards and stations. Representatives of other services work in close interaction with yard and station personnel. Their performance depends in large part on station masters. He and his staff can and should have a vigorous impact on the course of the technological process in the station or yard in all its phases and should display constant concern about improving the operation not only of yard and station personnel, but also railroadmen in other services.

One of the most important duties of the present-day manager is to establish in the collective a wholesome moral climate and to persistently strengthen work discipline. In this connection he himself is called upon to serve as an example of good organization in all respects and of an exacting attitude toward himself. If he does not have authority, it will be difficult for him to manage the collective. And a man wins respect when he is dedicated to his job, when he has the knowledge and the energy, when he is devoted to principle, when he builds his relations with his subordinates on the basis of mutual exactingness.

That is exactly why some station masters have such high prestige: Kinel--Sergey Nikolayevich Samorukov; Lyangasovo--Dmitriy Ivanovich Dolgiye; Kupyansk-classification yard--Nikita Vasil'yevich Chaprak; Kharkov-Balashovskiy--Lazar' Davydovich Svirsky; Otrozhka--Valentin Borisovich Nikitin; and many, many others.

The task lies in making their know-how, style and methods of management the property of every station master.

In March our newspaper GUDOK published under the department "Business Club of Station Masters" a series of articles in which some of you shared your know-how and introduced a number of valuable suggestions on improving the management of the process of handling traffic. These suggestions indicate the maturity of station masters and their thorough understanding of their role as organizations of the entire operation at the junction, their desire to do everything possible to perform the tasks facing rail transport. All these suggestions have been summarized and examined on the roads and in the main administrations of the ministry; many of them will be reflected in a decision of today's collegium and practical work in the future.

Much has been done by station masters, Comrade Gin'ko said in conclusion, much thanks to you for your effort. But more needs to be done. You have been committed to do this by the November Plenum of the CPSU Central Committee and by the very acute need to improve the transport service to the economy as quickly as possible.

[Reports by Station Masters]

S. N. Samorukov--Kinel

In the past quarter the operational situation on the railroad has been problematical. We were helped in coping with the difficulties of improving operational management by enhancement of the role of the middle tier and the work-team organizational form of work using the KTU [labor participation coefficient]. We created 16 work teams--4 on each shift. We discussed the results, the labor participation coefficient, of each one in assemblies attended by all the shifts to the last worker. This forces the stragglers to catch up and gives an incentive to those who are conscientious.

There is only one gap. Personnel on duty at the station work in five shifts, and all the others on four. The duty personnel should also be included in the same shifts: provision being made, of course, so that the total number of hours does not exceed the quota.

In the "Business Club of Station Masters" the suggestion was made that the station manager be relieved of duties not appropriate to him. To be specific, he should be relieved of monthly inspections.

S. S. Andreyev--Chelyabinsk-Main

Our junction, like many other junctions in the network, is working under a great strain, and sometimes we do not manage to get the flows of cars switched. Why? The answer has been given in the pages of GUDOK by participants in the "Business Club of Station Masters"; the technical development of our unit-train factories is lagging behind, the rebuilding and modernization of equipment is going slowly and disjointedly, progressive technology is in operation alongside backward and primitive technology, and there is no unified operational management at junctions, there is no general motivation of all subdivisions to organize the process of moving freight in accordance with an optimum pattern.

Humps began to be mechanized half a century ago, but still the work of uncoupling on the top of the hump has remained just as heavy and dangerous as though the fork had not made its appearance in that time. In recent years maintenance of the automatic coupling assembly of cars has dropped off sharply on the network. In every train there are two or three or even more broken chains. The humps lose 4-5 percent of their productivity as a consequence.

Our scientists should also think about the problem of assigning the trains on station tracks. At our station alone there are 36 flagmen, and they barely keep up with the work. How many of them are there on the entire road?

About the preservation of freight. More than a year ago we introduced this kind of procedure in our own operation: we drop cars with valuable freight from the hump onto specially allocated tracks which are under guard. We make up special trains consisting of cars with valuable freight (in the summer we add the refrigerated cars to them). The trains are guarded in the yards where

they originate and en route. We feel that a special plan for making up trains carrying valuable freight should be introduced on the railroad network.

A. P. Paristyy--Lyublino-Classification Yard

This makes 10 years since issuance of the decree of the CPSU Central Committee approving the performance of our station. All of these years the collective has striven to improve the technology on the basis of up-to-date equipment, introducing scientific management and developing competition. Rolling stock has begun to be used still better. Last year our standing time for through cars requiring switching was 4.6 hours, and in the first quarter of this year it was 4.4 hours.

We have been helped greatly by the initiative of enterprises of the Moscow Railroad in increasing the weight and length of trains. In the last 2 years average length of trains made up in the station increased by five cars, and incoming trains by 5.5. Car turnover has increased, but the number of trains accommodated has dropped, since they have become longer. This has reduced intervals between operations. The freight is also moved out faster: after all, fewer locomotives are now needed. It is sufficient to say that over the last 3 years there has been a saving of 10,000 locomotive assignment orders.

Among the 20 enterprises in the city of Moscow our collective took the initiative for strengthening work and production discipline. We accordingly called for a special point on discipline and stronger measures against violators to be introduced into the bylaws on discipline.

G. A. Smorgon--Nizhnedneprovsk-Junction

We are feeling an acute shortage of workers in the common occupations. The situation is the same at many stations in the railroad network. How is their training to be improved?

The curricula for training personnel on the job approved by GUUZ [Main Administration for Educational Institutions] fix a total period of 3-4 months for individual training. All of 210 hours are assigned just to theoretical classes! But after all young men and women are coming to us with secondary education. We feel that the training period could be reduced by a third if the curricula were revised.

Especially since training does not end there. The training of skilled personnel requires constant concern. There need to be assistant station masters and instructors for that purpose. Such staff positions do exist in locomotive and car depots, in firefighting teams, and in trainmen crews.

The lack of motivation on the part of the services of the junction concerning the results of the process of carrying traffic is having an adverse effect on the station's performance. For example, the power plant is not very concerned about normal lighting of the station yard. We have 275 searchlights that are not in operation: there are no lamps. But this does not greatly concern the power people.

Since 1980 portable radio transmitters have been put on the balance sheet of enterprises using them by order of the MPS. We have 50 of them. Who is supposed to charge and repair them? No staff has been envisaged for this purpose, and there is no space set aside. I feel it would be advisable to return to the previous system in which the radios would be maintained by the personnel for remote control, the signal system and communications.

V. P. Desyatnik--Darnitsa

I cannot agree with the proposal of the Chelyabinsk people and certain other participants in the "Business Club of Station Masters" that the station master should be given the status of chief of the junction. This would be a superfluous subdivision, something like the road division in miniature. Even the station master himself is not coping with that amount of work. Even as it is he is not managing to do what is assigned him.

We propose a different pattern for solving the problems of coordinating the operation of all enterprises in the junction: councils of enterprise managers and chief engineers. In our junction such councils are in operation. To be sure, at times they are not active enough. But direction of them is the responsibility of the deputy division chief and chief engineer.

A few words about the point system for yards and stations. If a yard or station gets 85 points, it is a noncategory station. And no one is interested in how many points it has beyond that. Our station Darnitsa has "pulled down" 347.8 points on the basis of its output. That amounts to four noncategory stations! But wages and staff size are the same as for one. There is obviously a need for some sort of differentiation here.

I would also like to propose revision of the list of cars which cannot be humped. It is no secret to anyone that if we strictly go by all the rules, hump yard productivity will drop 30 percent. The technical equipment of the humps affords every possibility for ensuring the safety of releasing the overwhelming majority of cars and types of freight.

We consider it indispensable to prohibit the shipping of wine and liquor and preserved foods in jars with escorts. In the summer they can be delivered in boxcars and in the wintertime in self-contained refrigerated cars or refrigerator sections. This will compel the shippers to observe more strictly the GOST [state standard] for packing, there will be less theft, and discipline will improve.

Yu. D. Chebotkov--Yasinovataya

We still have a great deal to do to improve the technology of operations. The conditions for making up trains have been greatly facilitated by conversion of all cars to automatic coupling, but the processing of shipping papers has become more complicated. Freight offices are not keeping up with the pace at which trains are broken up and made up. Computers need to be introduced more rapidly at the large junctions. Meanwhile at our yard the full set of software for the outdated M-6000 machine has not even been developed, but they are

getting ready to introduce the SM-2 computer. But ... without design arrangements for strengthening communications channels. In addition, the systems being introduced are nonstandard. That means it will be impossible to read information directly into the computers of other railroads. There is a need to set forth a compulsory list of software that would be part of the set of computerized management systems and to evaluate the operation of computer centers according to the level of assimilation of that list.

It is difficult for freight office operators to write off cars. Many numbers have been put on the cars illegibly. This problem of numbering should have been solved long ago. Number plates have given a good account of themselves, but there are few of them.

Freight transport inspection points are a weak link in the operation of yards and stations. We have learned to quickly discover defects, but at present we are not able to correct them quickly. There are no standard attachments for fastening hatches, and the system of sealing cars needs to be improved. Mechanized points for correcting freight transport irregularities should be created everywhere in classification yards after the example of the station Shkirotava. This will reduce the standing time of cars and will make for better preservation of the freight being carried.

Yu. S. Smotrin--Sverdlovsk-Classification Yard

It is well known that the operators in large part determine the output of humping facilities in classification yards. We have important difficulties training people in this occupation. If they are trained right at the control panel, there are recurring interruptions in operation and cars are damaged. Experience shows that when a shift includes one young operator, the productivity of the hump is six trains lower for the period on duty. After all, our yard is operating at the limit of its switching and traffic-carrying capabilities, and we simply cannot allow ourselves to lose that much pace. The need has arisen to train hump operators in GPTU [city vocational and technical schools] and in railroad technical schools.

In order to motivate workers in the common occupations to improve their skills, in order to reduce personnel turnover, we should introduce skill categories for them. Above all for train speed regulators, hump operators, train makeupmen and their assistants, and freight office operators.

S. P. Petrusev--Mariinsk

The uncoupling of boxcars involving transport defects has become a real trouble for us. Last year at just three yards and stations on the Krasnoyarsk Railroad about 5,000 such cars became uncoupled, more than 2,000 of them in Mariinsk. No one broke into those cars, nothing happened to the freight, and the seals were tightened and imprinted on the spot. But there was no seal, or it was damaged. And all the cars had to be uncoupled to be checked.

Now the main freight administration is preparing a list of freight which can in such cases be passed without checking the contents of the cars. But, first of

all, only with permission of the chief of the road and only where no conditions exist for transshipment. What does that mean: at fourth- and fifth-class stations? And second, no one has revoked the rule which places responsibility for protection of the freight in the car on that station which was the last to seal it. And one will hardly find people so bold as to risk sealing a car without knowing whether the freight in it is intact.

How do these transport defects come about? In the overwhelming majority of cases they originate at loading stations. The whole trouble lies in improper placement of the seal and tightening. If they are placed properly, the tightening stays firm, and the twine does not wear through.

There should be tighter monitoring of enforcement of car sealing rules. This is the direct duty of station masters.

In addition I feel that the weak wire the seal hangs from should be replaced by something stouter. In accepting a car, the acceptance and transfer officer examines the seal, turning it this way and that. Then the same handling is done in the destination yard, and then at way stations. The further the car travels, the more times the seal is turned, and the greater the likelihood of the wire being "twisted too tight," and of the seal being torn off. I have suggested to the TsM [not further identified] that it use capron fishing line for this purpose. The suggestion was rejected. Incidentally, Comrade Polikarpochkin, head of the administration for freight traffic bringing in revenue, rejected all 12 suggestions to improve the preservation of freight which had been worked out at our station. Is it possible that among the 12 there was not a single one that was worthwhile?

A. M. Verkhovenko--Osnova

Many questions have been raised in the "Business Club of Station Masters." Practically all deserve the most serious attention. But I would like to add something.

Unresolved problems have become a stumbling block in the way of moving the flows of cars. Cars without documents constitute one of them. There are a great many of them, and they stand for a long time. Of course, an effort has to be made to combat separation of documents from the car. But it is also time to take other steps. For example, to attach plates indicating the codes of the stations of origin and destination.

There are a great many troubles with transshipment from improper cars. The car maintenance people have issued a VU-25 form, and they have washed their hands of it, and the station master has to run around to find the resources, people and machinery for transshipment. It is time that some kind of uniform procedure was established here. And there is a need to introduce financial liability for loading freight in a car that is not in proper condition.

Tens of measures of every possible kind take up an immense amount of time. Every one is set forth on 6-8 pages, just try to read all that. And yet for every one of them there are also inspections and reports. In our view a

single document should be drawn up for the year: "Work Plan of the Collective." This plan should be the working document for the manager at every level. And his work should be checked against it, point by point.

P. I. Al'shevskiy--Minsk-Freight Station

In the past year our collective has overfulfilled all indicators. But here is a paradox: we have not received quarterly bonuses. Why? Well, because in the first and second quarters, say, the division did not fulfill the plan for loading agricultural machines. But we have nothing to do with those machines. Large stations have to be converted to independent cost accounting (khoz-raschet).

In general the matters related to the financial and economic plan deserve the most serious consideration. In our view the proportions have been unjustifiably established in distribution of bonuses according to the results of competition. It is provided that 65 percent of the total amount be paid to workers and 35 to employees. But after all the proportion between the two is altogether different! The man on duty on the hump is an employee, the freight office operator is an employee, and so are representatives of other crucial occupations. As a result sometimes one has to look for workers to give bonuses to, but we are not able to pay incentives to people who actually have distinguished themselves in their work.

The decisive factor in the development of production is raising labor productivity. But this is not the primary indicator in the formation and use of incentive funds, especially the material incentive fund. Moreover, although a certain rate has been set (0.38 percent for each percentage point of overfulfillment of the target for the rise of labor productivity), when the material incentive fund is actually credited, this is not taken into account, they allow credits to the fund only up to the planned proportion. This practice only holds back the rise of labor productivity.

A. S. Ryabykh--Bryansk-Lgovskiy

The success of plan fulfillment and performance of socialist obligations both of a junction as a whole and also of each enterprise separately depends on how smoothly all the services operate and how capably they are able to act in their own interest in order to achieve the common goal.

We attribute first importance to interaction. The most important instrument for strengthening it is socialist competition among those involved at the junction for operating efficiency and the quality of their work. The trade union committees of the enterprises concern themselves with organizing the competition. The results of competitions are totaled up quarterly at joint sessions. Forms of financial and nonfinancial incentives have been worked out. One such form is the prize entitled "For Smoothness and Mutual Interaction." There are four of them. They are awarded in formal ceremonies to the best work team of the PTO [not further identified], switching locomotive engineer, electric motor mechanic, or track work-team leader. Similar prizes have been established at every related enterprise. They are awarded to the best

operational dispatcher, the duty officer at the station, the train makeupman, and the car speed regulator.

Competition under the motto "From Efficiency and Quality at Every Work Station to an Enterprise of High Efficiency and Quality," which has become widespread in all collectives of the junction, has been highly beneficial. Every one of them has been awarded the title "Enterprise With High Transport Efficiency and Quality." And now this prestigious title has been awarded to the entire junction as a whole.

7045

CSO: 1829/216

RAIL SYSTEMS

GIN'KO ON INDUSTRIAL SPUR LINE DEMURRAGE

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 3 Feb 83 p 2

[Article by V. Gin'ko, first deputy minister of railways: "The Rhythm and Arrhythmia of Rail Shipments"]

[Text] Rail freight shipments begin and end on the spur lines of enterprises. In total length this network is equal to the length of main lines. One can understand, then, the importance of efficient work of transportation departments of enterprises to maintain a given regularity of shipments, to speed up freight delivery and to stay within the allowed freight car turnaround time.

The 26th CPSU Congress demanded improved coordination of the operation of all branches of transportation and their interaction with other sectors of the economy. How is this important demand of the party being carried out?

There have been definite successes in this matter. For example, "Rostsel'mash" was for long years among the stragglers in freight car use. This association paid the Northern Caucasus Railroad hundreds of thousands of rubles of demurrage for rolling stock standing idle beyond the allowed time on its spur tracks. But in recent years the situation has improved noticeably.

Measures aimed at developing transport and warehouse management were drafted at "Rostsel'mash" and have been carried out successfully. Last year "Rostsel'mash" not only met the standard for car handling, but by surpassing it made about 1,000 units of rolling stock available for the national economy.

The list of enterprises adhering to the planned rhythm of the shipment conveyor is increasing year after year. I would mention the Lvov experiment in using the rolling stock of MPS [Ministry of Railways], which has been approved by the CPSU Central Committee. It calls for progressive methods of freight handling, development of spur track and transport operations as a whole, application of progressive allowed car turnaround time with transition to the new indicator of rolling stock standing time--the "car-hour."

The results have been forthcoming wherever a responsible attitude is taken toward progressive experience and where the interests of the state are respected. On the spur lines of enterprises of Lvov Oblast last year the allowed standing time of rolling stock was adhered to on the average. The railroad's partners

in Belorussia even overfulfilled the targets which were assigned--there every car was handled at handling stations 6 minutes faster on the average than called for by the standards. Since the middle of last year enterprises of LiSSR have also come up to the level of the assigned standards. A trend has been outlined toward shorter standing time in UkSSR, LaSSR, MSSR, GSSR and UzSSR.

All of this is unquestionably the result of the great efforts and fruitful cooperation of the sectors involved in performing a task important to the national economy. But in the country as a whole standards are not being met with respect to freight car standing time. Negligent customers keep rolling stock for loading and unloading so long in excess of the standards that they nullify the efforts of the best collectives. MPS specialists calculate the total losses in car-hours per year and convert these figures to actual operation of the transport system. And it turned out that because of excessive standing time on the premises of customers the steel roads failed to carry 50 million tons of freight they otherwise would have carried. This is almost a 5-day performance by all Soviet railroads.

One important peculiarity is worth noting. When an enterprise ships out its products, the managers do everything so that the loading is not delayed. This is easy to understand: shipment of the product signifies its sale. As is well known, the principal economic indicators are "linked" to this: both fulfillment of the basic plan and profit and material incentive funds.

Alas, the attitude is different at the other end of the transport operation. Cars which have come thousands of kilometers may not be received on the spur track for days. Sometimes a portion of the loaded cars have to be uncoupled from the trains and left on sidings nearby the final destination. And then they have to be moved again at considerably greater cost than in the normal pattern of operation. One car out of every 10 remains unloaded on industrial sidings. There are even "recordholders": in AzSSR this is the fate of one car out of every four.

This kind of management occurs as a rule because of a lack of organization and a neglectful attitude toward the good of the nation. How otherwise is one to explain that in the Transcaucasian republics only 30 percent of the cars delivered everyday to spur tracks are unloaded at night, and in certain oblasts of KaSSR and the Volga Region the figure is even 15 percent? How is one to explain that on weekends and especially holidays the unloading figure is usually a fraction of what it is on workdays? There is a work force numbering in the millions employed in railroad transportation, and it does not occur to any of them to break the rhythm of shipments because of weekends and holidays.

Another important reason for the jerkiness is that the development of transportation departments of enterprises is lagging noticeably behind the level of their principal production operation, behind the needs imposed by the uniform rhythm of the country's entire transportation conveyor.

The MPS and railroad administrations are striving to eliminate as fast as possible the disproportions that have occurred in development of main line transportation and spur lines of our clients. Every year joint measures are worked

out to eliminate bottlenecks over the entire chain for delivery of the freight of the national economy. If these measures were actually carried out, many of the difficulties would already be behind us.

In just the years of the 10th Five-Year Plan our partners failed to complete development of 325 adjoining stations (stantsii primykaniya), 650 new tracks were not laid to adjoining stations, and over those same years freight shippers and consignees failed to build 350 tracks at their own stations. Items on the agreed list which were not installed include 16 car tippers and 90 cranes, 28 unloading trestles were not built, nor were a large number of warehouses and shops for thawing freight shipments frozen en route. These are the overall figures, which are somewhat impersonal. Here are some more specific figures. At enterprises of USSR Minchermet [Ministry of Ferrous Metallurgy] 115 tracks were not laid at adjoining stations, 136 were not laid at stations located on plant grounds, and 9 wagon tippers were not put into operation.

In the current 5-year period the pace has stayed the same, only half of what was outlined is being done. Grain-receiving enterprises of the Ministry of Procurements, for example, are receiving grain in specialized self-unloading grain cars. MPS will in coming years be striving to carry all shipments of that kind, in full conformity with the assignments of the May (1982) Plenum of the CPSU Central Committee, solely with cars of that type. But ... about 40 percent of the shippers have not made the preparations for receiving them. Some unit grain trains stand idle for days waiting for their load to be received.

SOTSIALISTICHESKAYA INDUSTRIYA has written about the Uvarovo Chemical Plant more than once. For many years the enterprise dragged out the effort to attain rated capacity. But for several years now the capacity has been considered attained, but the national economy is not receiving the requisite benefit. The main warehouse capacities are not in line with the rated output: for storing apatite, furnace oil, ammonia, acid.... The adjoining station Oblovka was supposed to be developed under the plant's appropriation (titula): the proposal was made that the station track be lengthened there, that a highway overpass be built, and that a system be introduced for electrical centralization of switches and signals. None of this has been done. And the office and shop buildings at the station, which were not completed, have already become unsuitable after several years of mothballing, and are in need of substantial restoration. It is not surprising that cars stand idle here for more than a day, although the standard turnaround time agreed to between the parties is 7 hours.

Incidentally, the standard turnaround times are set solely on the basis of the technical facilities which the spur track has. If, say, the grain-receiving enterprise or chemical plant lacks appropriate equipment for unloading, then the standard is increased. As they say, there is nothing more you can do, let the rest of the train stand at the station even a week.... However, the way our friends in Czechoslovakia and the GDR do it, a customer is accountable for the car as soon as it reaches the adjoining station. This encourages faster development of transport departments of enterprises, since far more can be lost to demurrage. The MPS long ago raised the question of revising the

Charter of the USSR Railways to eliminate from it the mandatory "adjustment" of the standard turnaround time to the technical facilities of the spur track.

Every freight delivery cycle begins and ends on a spur track. It is here that the pace of shipment is set, it is here that the tone is given to car turnaround time. Unfortunately, at present more has to be said about arrhythmia caused by the unreliable operation of the transportation department of enterprises which are the partners of the railroads. A radical change of the attitude toward those departments, their development to meet the requirements of the day, is in the interest of the entire economy and of our entire society. This was referred to in the recent decree of the CPSU Central Committee and USSR Council of Ministers on improvement of the economic mechanism of transportation enterprises. They undoubtedly include industrial transport enterprises. We must hope that our partners--freight shippers and consignees--have that understanding of the task that was set and do not view the matter solely within the limits of their own departmental interest.

7045

CSO: 1829/215

RAIL SYSTEMS

KODAR TUNNEL CONSTRUCTION CONTINUES ON BAM LINE

Moscow IZVESTIYA in Russian 1 Jan 83 p 1

[Article by A. Kleva, IZVESTIYA correspondent: "Mainline of the Century"]

[Text] On New Year's Eve yet another landing stage was achieved by the builders of the BAM: drifters from the 12th detachment began work on the two-kilometer section--the final part of the Kodar Tunnel, the largest in the country.

"They assumed that cutting into the mountain massif would be long and difficult," said the chief engineer of Bamtonnel'sstroy, R. Kasapov, "but the very-experienced brigade-leader, G. Kuznetsova, to whom this complex operation was entrusted, coped with it amazingly rapidly. Step by step, moving aside large blocks encased in treacherous ice, she proceeded deeper and deeper into the permafrost thickness of the mountain range. Certain obstructions which had been left over from ancient earthquakes even had to be removed by hand...."

Now at the 130th meter of the excavated tunnel the path is blocked by monolithic rock. The geological experts have confirmed that ahead of us is the solid wall of stone which comprises the Kodar Mountain Range. Now we can use explosives, penetrating into the rock three meters at a time.

"And if we place a marker here today," I asked, "then how far from here will the brigade be at the end of 1983, which has just begun?"

"Within a year we will already be on the other side of the mountain range!" confidently answered the tunnel builders. And they explained that they were using high-speed drifting technology. They have countered the low temperatures at the cutting face with the precise operation of a whole complex of machinery which fully supplies the work zones with heat and hot water.

In February operations on the opening coming from the opposite direction will be begun by V. Smirnov's brigade. As early as the second half of the present year finishing operations will be undertaken here, and the tunnel will be prepared for use.

2384

CSO: 1829/212

RAIL SYSTEMS

CLIMATE, GEOGRAPHY HAMPER BAM CONSTRUCTION

Moscow GUDOK in Russian 18 Jan 83 p 1

[Article by V. Chul', GUDOK correspondent: "The Muyakan Barriers"]

[Text] This year the rails of the BAM, after overcoming the mountain pass, will reach the Eastern foothills of the Severomuysk Mountain Range--and the builders will be immediately "welcomed" by a whole "bouquet" of surprises from northern nature. Up to the Muyakan such factors as the following have probably not been known by the BAM workers: an extremely high seismicity (up to 11 points) is accompanied by treacherous permafrost, while the small river is marked by the fact that its level rises and falls sharply; furthermore, it is characterized by ice floes. It is precisely here that a settlement for the railroad workers and the Muyakan Station must be built within tight deadlines.

The task of erecting the settlement has been assigned to workers from Belorussia. The SMU-251 Belbamstroy Group has countered the treachery of Siberian nature with an intelligent organization of the task and precise calculations. During a brief period of time they have assimilated one and one-half times the planned amount of capital investments. While the temporary housing was being built, the brigades and sections were being formed and rallied.

Outstanding production indicators have been achieved in the construction of the industrial base by A. Kirillov's brigade of metal structural component installation workers. It is leading in the socialist competition and constantly exceeding its plan assignments. Thanks to the shock work by this group, the machine workshops, carpentry shop with its saw frame, and construction area for assembling reinforced-concrete components are all being put into operation ahead of schedule. The workers from Belorussia understand that the industrial base will allow the assault on the barriers of Muyakan to begin more rapidly.

A year ago a competition was unleashed within the Belbamstroy among the carpenters' brigades for the right to be the first to begin building the railroad workers' permanent settlement. Unanimously acknowledged as the winner was the group headed up by N. Dokshanin. It was awarded the title of Group of Communist Labor. Now the brigade has already proceeded to erect the first four apartment houses. And to build even a modest-sized building here is a problem. Houses rise on tens of piles which are frozen into drill-holes bored into the frozen soil. Designers ventured to erect only two of them, by way of an experiment, on ribbon-type foundation structures.

By the 60th anniversary of the formation of the USSR a sub-station will be put into operation which will feed energy to the construction site of the Ust'-Ilimskaya GES. This will speed up the pace of operations.

We should also mention yet another barrier--the paper one. It has proved quite a hindrance to the workers from Belorussia in concentrating their basic efforts on building housing and production facilities. The fact is that the planners delayed turning over the necessary documentation. To be sure, they have promised to present it at the beginning of this year.

Muyakan is a difficult milestone for the many sub-divisions of the Buryat Section's transport builders. Beyond the Severomuysk Mountains the permafrost will exert an even greater effect. The bridge builders know this more acutely than anybody. On the stage up to Taksimo they will have to bore drill-holes under bridge supports for about 36 kilometers. Nor will it be easy for the construction-installation trains and the mechanized columns. We need to prepare for these experiences today.

2384

CSO: 1829/212

RAIL SYSTEMS

'VL-84' LOCOMOTIVE DESIGNED FOR BAM PLAGUED BY PROBLEMS

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 5 Jan 83 p 2

[Article by A. Valentinov, scientific observer: "In a Labyrinth of Agreements"]

[Text] "The Baykal-Amur Mainline [BAM] passes through territory where the temperature drops to 60 degrees below freezing. What is required here is a special rolling stock with UKhL [expansion unknown] performance. In this regard the All-Union Scientific-Research, Plan-Design, and Engineering Institute of Electric Locomotive Construction (VELNII) in 1975 was given the assignment of developing the VL-84 electric locomotive especially for the BAM.

In 1981 our Novochoerkassk Electric Locomotive Construction Plant manufactured two experimental models of the new locomotive. However, the design documentation for the electric locomotive, as worked out by the institute, does not meet the requirements of the engineering task. It contains materials which are not recommended by the state standards for operation in regions with a cold climate. Nevertheless, the inter-departmental commission, serving on which were representatives of the ordering client--the Ministry of Railways--accepted these locomotives."

This alarm signal was sent to the editors by a member of the People's Control Committee of the Novochoerkassk Electric Locomotive Construction Plant, T. Vdovenko. I can state the following right off: he has not transgressed against the truth. Tests of the new electric locomotive were conducted in Shcherbinka, near Moscow, where temperatures of 60 degrees below freezing are only heard about on the radio. Furthermore, it could not have been tested at such a temperature: only 10 percent of its assemblies were made for UKhL performance.

And, judging by the state of affairs, serial production of locomotives for the BAM will hardly begin during the specified time period--in 1983. So why did the inter-departmental commission, which was headed by a representative of the client -- the chief of the Division of New Electric Locomotives of the Ministry of Railways TsT [expansion unknown], V. Kulish, sign the acceptance act?

"But we did not really believe that we would receive the new locomotive by the appointed deadline," V. Kulish calmly replied at our meeting. "Therefore, at first we agreed to make changes in the engineering assignment, easing the requirements. And then we accepted the experimental electric locomotive, taking these changes into account...."

Merely any one of us, after ordering a winter overcoat in an atelier, would agree to accept in its place, say, a raincoat. But here the railroad men, after laying out 1.6 million rubles, easily reached a compromise. But what kind of arguments could have been used to convince them by the manufacturer--the Ministry of the Electrical Equipment Industry?

"If the Ministry of Railways had not made any concessions, there would have been no such locomotives," I was told by Yu. Romanov, chief of the Soyuzelek-trotransmash VPO [All-Union Industrial Association] of the Ministry of the Electrical Equipment Industry. "We were supplied by related industries. Have a little chat with the developers from the VELNII...."

But in Novocherkassk the conversation with V. Yanov, the VELNII director, began somewhat strangely. After reading T. Vdovenko's letter, he merely said: "Let's have a look at the documents...."

And at his orders staff members began bringing files into the office--thin ones, thick ones, and very thick ones. There were many files--regarding a number of complete sets which should have been supplied for the experimental electric locomotives by enterprises of various ministries. One of them contained the minutes of a specially created "Staff on Complete Sets," which had been specially created at the institute.

"This is the correspondence of the last four years," explained V. Yanov, satisfied with the effect he had produced. "As far back as 1978 we sent out requisitions to all those who are now supplying assemblies for the serial electric locomotives. The request was a single one: give us these complete sets but with UKhL performance. Unfortunately, out of 12 ministries only the Ministry of Instrument Making, Automation Equipment, and Control Systems and the Ministry of Chemical and Petroleum Machine Building responded in a positive manner. The remaining ones churned out a mountain of requests and rejections."

It would seem that when it is a matter of such a serious task, there ought not to be such poor organizational coordination. Unfortunately, the real picture is far from this. The Ministry of the Automotive Industry acted in the simplest of all manners: to a request for windshield wipers with UKhL performance it responded with a categorical refusal. And then it constructed a conspiracy of silence: six letters addressed to Minister V. Polyakov and his first deputy, Ye. Bashindzhagyan, remained without answer--just as if they had been dissolved in the corridors of this ministry.

Not the best impression is left by the lawsuit (it cannot be called anything else!) between the creators of the VL-84 and the Ministry of Heavy and

Transport Machine Building. From the very beginning the specialists of this ministry took a "hard-line" position: out of 20 requisitions they accepted... only one.

Why? The Ministry of Heavy and Transport Machine Building is a ministry not only for heavy but also for transport machine building. Equipment with UKhL performance will soon be needed by itself for producing diesel locomotives, railroad cars, and suburban trains. By the logic of things this sector should have begun long ago to develop such equipment. And the requisitions of the creators of the VL-84 did not mean an additional load for it: you know, it was not a question of large batches of new items but merely of sets for two experimental locomotives.

"Yes, we have a comprehensive program for creating equipment with UKhL performance," said P. Sitnikov, division chief of the Ministry of Heavy and Transport Machine Building's Soyuzvagonmash VPO. "But it has different deadlines. And we will adhere to them. We will make the required equipment for ourselves, and then we will also supply it to related industries...."

But these are today's arguments. At first, moreover, the specialists at the Ministry of Heavy and Transport Machine Building tried to hide behind the back of their own supplier--the Ministry of Petroleum Refining and Petrochemical Industry: for two years they kept referring to the lack of rubber packing seals and lubricants capable of operating at 60 degrees below freezing. Then they agreed to increase the number of requisitions accepted to 15. And they categorically refused to fulfill the 5 remaining ones.

Deputy Minister Ye. Matveyev achieved a compromise solution without difficulty: two requisitions are being accepted, while regarding two others the Ministry of Heavy and Transport Machine Building is supplying ordinary sets of items for the experimental electric locomotives. And only in the future (without any indication of deadlines!) will they be with UKhL performance. With regard to the fifth requisition it was suggested that the developers turn to...the Ministry of Machine Building for Light and Food Industry and Household Appliances.

"With such a success we could have obligated ourselves to make space ships," angrily stated G. Saltykov, the chief specialist of the Soyuztorgmash VPO. "So it turned out that our compressors for the refrigeration units were suitable for serial electric locomotives. And we are supplying them. But to make a unit to withstand a temperature of 60 degrees below freezing!.... Our sector does not even have such specialists...."

There have been quite a few such clashes in the history of creating the VL-84 experimental models. But the entire paradox lies in the fact that, in the final analysis, most of the related industries agreed to supply sets of components with UKhL performance. Thus, out of the 108 items ordered, 37 have already been assimilated, while another 44 are at the stage of development or manufacture. After tests were run, it became clear that 25 items could operate at 60 degrees below freezing without reprocessing. But the price of these "achievements" amounts to four years of bureaucratic delays, which held up for a long time the creation of electric locomotives for the BAM.

To be sure, V. Yanov, the director of the VElNII, does not agree with such a conclusion:

"Yes, for now the VL-84 has only 10 percent of 'frost-resistant' assemblies," he says. "However, we have been able to test out many structural elements. Including something which is essentially new for such heavyweight locomotives-- a support-frame suspension for the motor, which will protect it from shocks on the rail-joints. Now, as sets of components come in with UKhL performance, we will substitute them for the ordinary ones."

The substitution of assemblies can hardly succeed without reprocessing the structural components. Furthermore, 80 percent is not 100 percent. And freezing temperatures do not take arithmetic into consideration. At 60 degrees below freezing the strongest steels give out, rubber becomes as brittle as glass while lubricants solidify and cease to draw off heat. It is enough for one such component to fail in order to put a powerful electric locomotive out of operation. Can it be that the railroad workers really do not know this?

"For the time being we plan to operate the BAM, counting on today's VL-80R electric locomotives," responded V. Kulish.

"But, you know, they were not designed for extreme freezing temperatures, were they?"

"Well, what of it?" Viktor Fedorovich shrugged his shoulders. "There are many methods of getting around nature. For example, we will constantly keep the locomotives in a 'hot' state--switched into the electric network. And the mechanics on duty will regularly check out the condition of the basic assemblies."

Needless to say, with such an approach, the operation of electric locomotives would be greatly complicated, and additional energy expenditures would be required. But the main thing is that this would mean relying on primitive production methods, as a result of which the enormous outlays on building the BAM could not bring in the necessary return on investment. Is it possible that this was not understood by the developers, who put the blame on the related industries, and the persons in the related industries themselves, who refer to the tightness of their own assignments?

If we look at this story not from the point of view of official positions, but from the party point of view, that of civic responsibility, then quite a few questions arise willy-nilly. Yes, judging by the events described here, the "mechanism" for creating new equipment in our country is still far from perfect. And it needs to be improved. But why did People's Controller T. Vdovenko consider it his duty to write a letter to the newspaper; why was this not done by the director of VElNII, V. Yanov, the chief of the Soyuz-elektrotransmash VPO, Yu. Romanov, or the head of the inter-departmental commission, V. Kulish? They also had other possibilities. And so why did they prefer a chain of compromises inflicting damage on the cause to a principled position?

RAIL SYSTEMS

NEW, RESTRUCTURED TARIFF SYSTEM URGED

Moscow GUDOK in Russian 28 Apr 83 p 2

[Article by I. Buchin, engineer, and A. Kreynin and L. Mazo, candidates of economic sciences, Moscow: "Parameters of Freight Rates"]

[Text] Real freight rates took their present form as a result of the 1967 and 1974 reforms of rate schedules. It is significant that their average level has not risen since the end of the forties. On the contrary, in the period from 1949 to 1967 they dropped by one-third. The profitability of rail transport has risen year after year. The sizable reduction in the cost of carrying freight has had an effect. After all, this was the period of intensive replacement of steam locomotives with the more economical electrical and diesel traction.

After 1967, although the level of the rates did not change, the profitability of the railroads dropped substantially. The reason for this is that the wholesale prices of diesel fuel rose, the wages of railroad workers increased, new depreciation rates were introduced, and fixed capital was reevaluated. The level of profitability was also influenced by the negligible growth of the volume of freight and labor productivity in the 10th Five-Year Plan.

In 1982 profitability continued to drop. As a result there was a considerable deterioration of the financial indicators of the operation of rail transport, and its relations with the state budget became more complicated. Moreover, in 1981 and especially in 1982 not enough profit was left to pay the charge on fixed capital in the amount of 6 percent. For that reason economic incentive funds diminished. Such a situation cannot, of course, be tolerated. There is a need to increase the efficiency of hauling, to vigorously seek out potential for reducing the cost of carrying freight. But a number of objective causes of more expensive freight traffic need to be taken into account as well.

Specialized cars are being widely introduced. The majority of them are more expensive than general-purpose cars, and as a rule they have a high figure for deadheading. Shippers and consignees gain from specialization--the quality of freight service is improved, losses are reduced, transportation is absorbing the additional costs. Containerization also gives freight shippers a sizable saving on loading and unloading as well as on containers. But as freight service is now organized, transportation is compelled to undertake additional expenditures for which it is receiving practically no reimbursement.

An analysis shows that if the present freight rate level is retained, taking into account the higher expenditures for wages, fuel, electric power and supplies, rail transport in 1985 will be able to pay into the budget a charge on capital of less than 2 percent of its value. The profitability of the railroads will drop sharply. Unless the present rate schedules are changed, normal cost-accounting activity will prove impossible.

The rate schedules are supposed to reimburse transportation the costs of freight service and to ensure its normal cost-accounting activity. It is important that the system of rate schedules operate toward better utilization of transportation equipment and other equipment and promote optimalization of freight traffic and its proper distribution among the different branches of transportation.

The new rate schedules should make provision for the minimum profit which would cover the charge on fixed productive capital and working capital subject to standard allowances, would guarantee formation of economic incentive funds in the necessary proportions, payment of interest on bank credit and reimburse losses from operation of housing, municipal services and utilities and outlays to maintain cultural and educational institutions, children's institutions and Pioneer camps.

It is important to set future freight rate schedules so that internal sources formed within transportation, specifically the charge on funds formed from profit and those depreciation deductions which go for full replacement, cover the financing of the necessary capital investments in projects for production purposes.

It is especially important to determine the cost of freight service correctly. After all, this is the basis for setting rates. When the 1967 and 1974 rate reforms were carried out, the necessary methods and practical base were created. The rate was determined by adding together two components. The first of them was the costs of transportation for operations at point of origin and destination involved in the preparation of cars, their standing time during loading and unloading, and the makeup of trains. The second addend was the costs of moving the freight in cars, which depend on the distance the freight is carried. The new rates should preserve this principle, perfecting the method of calculating the cost of carrying the freight in new types of cars, including specialized cars.

The network survey of static loads, of distribution of the volume of traffic and of car runs by types of shipments, which was conducted in May of this year, affords the necessary material for the calculations.

The improvement of rates is not confined solely to reforms; it is being done constantly. For instance, in 1982 Rate Manual No 1 of the MPS [Ministry of Railways] was reissued. The number of rate charts for car lots has been greatly reduced. Charges by the ton have been introduced for convenience of calculation when cars are overloaded, and the procedure for rounding off the weight of liquid freight has been standardized.

New and improved tariffs on container and palletized shipments and charges for loading and unloading operations performed with railroad equipment were introduced as of 1 January 1983. These tariffs were worked out by specialists of VNIIZhT [All-Union Order of Labor Red Banner Scientific Research Institute of Rail Transport] and the main freight administration of the MPS. They are rather simple and convenient to use--they are the same for all freight, but differentiated by container categories.

Probably the same kind of structuring of rates cannot be required for car lots. But their present structure seems complicated. First, there are a large number of car lot charts. In 1982 the rate manual in effect had 14 fewer charts, but still they run to 120. Second, they involve the use of both ton-basis and cost-basis methods of calculation. Aside from that, for certain types of freight a special computational procedure has been established for car lots. Thought needs to be given not only to ways of reducing the number of rate charts, but also reducing the number of separate computational rules and to eliminating the numerous qualifications which have to be remembered. This ultimately results in numerous errors.

Car-lot rates must be adapted to machine methods of determining shipping charges. After all, this is the most common form of freight shipment and billing.

It would be wise to set up a tariff for payment of shipments in expensive specialized cars which would encourage correct distribution of the resulting benefit between transportation and enterprises which are owners of the freight. A certain increase in the expenditures of freight owners for shipment should in this case be offset by those benefits and conveniences which they realize from the use of the specialized cars (reduced expenditures for loading and unloading, for containers and packaging, reduced losses of freight, during shipment).

At the same time the new rates for shipment in specialized cars must not complicate calculations of shipping charges; they should be grouped by close parameters and reduced to easy-to-use tables with the final charges. The differentiation of shipping charges on oversize freight depending on how oversize it is must be clearer and should correspond to differences in carrying costs.

The present car-lot tariffs embody a differing profitability of freight service as a legacy of past reforms. Not uncommonly these differences are very sizable and unjustified. That is why shipments of a number of types of freight prove to be highly profitable, while others afford a low rate of profit or even mean a loss for transportation. Under present-day conditions there is no basis for such a practice.

Freight tariffs must be so structured as to ensure economically optimum distribution of traffic among the branches of transportation. To be specific, they should stimulate shippers shipping over short distances to use highway transport rather than rail or to use water transport when the waterways parallel the railroad lines. For that reason freight tariffs of the various branches of transportation must be interlinked.

It is by no means a matter of indifference when a tariff reform is carried out. In our opinion, it is most advisable to do it from the outset of a 5-year period. Then freight owners and supply and sales organizations will be able to determine shipping costs for the 5-year period on the basis of the new tariffs. In addition, better comparability will be ensured for financial indicators for 5-year periods.

Specialists of the MPS and scientific associates of VNIIZhT have undertaken a network survey of traffic and intend to determine on that basis the cost of carrying individual types of freight and to work out new and improved tariffs. Putting them into effect will help to raise the efficiency of operation of rail transport.

7045

CSO: 1829/218

RAIL SYSTEMS

PROLIFERATION OF PLANS, INDICATORS ENSURES FULFILLMENT

Moscow IZVESTIYA in Russian 4 May 83 p 3

[Article by M. Gorbis, GUDOK correspondent, and F. Chernetskiy, IZVESTIYA correspondent: "The Planning Merry-Go-Round"]

[Text] "What sort of things interest you?" was the question they met us with in the planning department of the Odessa division of the Odessa Railroad.

We asked how the division had fulfilled the plan for the previous year, 1982?

"With respect to what indicators?"

"Preferably for the basic indicators. Say the volume of originating freight, freight loadings and car turnaround time."

"Under which plan?"

The question put us in a blind alley. But in order not to seem people devoid of a sense of humor, we cheerfully answered with an ironic smile:

"Under the state plan, of course. What other might there be?"

"Then you need to go to the freight department."

"Excuse me, but what plan do you have in the planning department?"

"We have the production and financial plan. It is still commonly termed the cost-accounting (khozraschet) plan. This is, as they say, an annual plan. In some places they confuse it with an operational plan. Is that clear?"

"More or less," we answered glibly.

"Loading?" they repeated the question in the freight department. "That we can do. But we have nothing at all to do with car turnaround time. That would go in the technical plan, and the technical plan is in the traffic department. Or in the records department."

The thing had taken a turn that was obviously no joke: there were so many plans that even the names were confusing. So in the emergency we had to organize a round-table discussion in order to clear up the picture through the joint efforts of representatives of the various departments and specialists.

The checks, comparisons, computations and conversions began. The minicomputers were put to use. An ad hoc institute of voluntary consultants had imperceptibly taken shape. Repeatedly there were high words spoken with ease about problems that were far from easy. At length we were able to ascertain that the range of plan fulfillment by the Odessa division of the Odessa Railroad, specifically for the volume of freight loaded, was rather wide--from 100.5 to 96.7 percent. This depended on which plan you were using. Under the production-financial plan it was 100.5. Under the state plan 97.9, and under the technical plan 96.7 percent.

Now do you understand everything, reader? No? We also felt a bit awkward: we had never been so confused.

They explained it to us in layman's language what was what. The first plan, the production and financial plan, regulates the division's financial functions. The second, the state plan, is made up from the sum total of the monthly plans and is the plan customarily set down as law for the enterprise. The third is the mobilizing plan. The planners and financial people are guided by the first. The traffic people by the second, and anyone who loads and unloads freight by the third. Is that clear? they asked us.

We were silent. Little by little this multiplicity of plans generated at first an imperceptible, and then ever greater sense of dizziness; one's thoughts begin to whirl around so that even obvious truths begin to be perceived as doubtful. That strange psychological state comes over one which is customarily described by the broad term: "overload." This is when a man simply loses his orientation and doesn't know where to begin, what to tackle or at all what to do.

We quietly rose from the table and left the room in a state of slight prostration. And only somewhere in the depths of the slowing whirl of thoughts was there the slight reverberation of the recurring question "So did the division fulfill the plan or didn't it?"

We are not the only ones who have recurring questions. The railroadmen themselves are susceptible to quite a few of them. Imagine a locomotive engineer starting out on a run. He has got the train moving, he has passed the station switches, he is out on the road. He has to pick up speed. It is so easy to say--pick up speed. The whole trouble is what speed? This is quite a riddle. Judge for yourselves: under the annual plan the locomotive is supposed to travel at a speed of 30 km/hr on the particular run, under the technical plan 15 km/hr, and according to the assigned schedule 20 km/hr. One thus wonders at what speed the locomotive is supposed to travel? This is not a rhetorical question: it was put to the authors of this article by A. Buchatskiy, Kherson-Port stationmaster, in a letter. He wanted to get a sensible explanation for the following situation. Cars, as is well known, do not only run on

main rail lines, but they also stand in stations and on industrial sidings during loading and unloading. It is, of course, desirable for them to stand as little as possible, but exactly how much should they stand? What is to be the reference? What is the basis of computation? That is what A. Buchatskiy would like to know. And one can understand him. After all, under the technical plan of that same station Kherson-Port the assignment for car standing time was set at 25.6 hours, under the technological plan 26.9 hours, under the annual plan 28.2 hours, and under the cost-accounting plan 32 hours. It scrambles one's ideas, doesn't it? Thoughts are thoughts, but one also has to work with such plans!

Incidentally, have you ever had occasion to listen in when railroadmen are exchanging experiences over the intercom? We must note that they make an impression on someone from outside, someone, say, like us, the authors of this article. We will not touch the emotional side, with its boiling over of passion, nor will we penetrate the forms of intercourse and methods of persuasion which are used. We will stick to the main thing. And this is that after such an exchange one sometimes involuntarily concludes that the whole thing is coming apart at the seams, that everything is going, like they say, to ruin: targets are not being fulfilled, plans have irreparably "piled up," everything is rolling down the hill. But then the week or the quarter comes to an end, and everything changes, as with the waving of a magic wand: the work is completely up-to-date with the plans, everything, in any case most things, are hunky-dory.

So, what is the point? The point is, to put it figuratively, one plan is used for scolding, another for reporting, and a third for praise. The main thing here is to get your bearings, to get a clear idea where and when each particular plan is being used as a reference.

Since there are many plans, and they do not always agree, and sometimes even contradict one another, those carrying them out, if they are not to lose their way in the labyrinth of plans, as in the catacombs of Odessa, have to have a flexibility of mind and remarkable abilities for finding a way out of blind-alley situations on the run. Such blind alleys are encountered rather frequently. The Pomoshnaya railroad car depot, say, is able, according to the design capacity, to repair six cars a day. It has been given an assignment threefold greater than that.

The workers of Pomoshnaya should be paid their due; they did not take fright; without extra words, without any show of emotion, they set to work.

First they began to choose those cars in comparatively good condition. According to the technical process each car should be under repair for an average of nearly 1.5 days. But those in comparatively good condition can be put back in service in 3-4 hours. Some reserve, isn't it?

Still another innovation was made. Regardless of the car's condition, regardless of whether the repair was completed or not, it was in any case kicked out the door after 8 hours. But this selective high-speed method of repair suffered from one essential defect. On the sidings, you yourself can understand

It, those cars piled up which were in need of more extensive repairs. All the allowed allowances for accumulation were exceeded. The Pomoshnaya car repair people began to ring the bell. The bell was heard in the car service of the Odessa Railroad. They quickly found a way out. It was radical, surprisingly simple and painless: first they raised the standard allowance for the permissible remainder of cars which were not in good repair from 30 to 130, and when even that allowance proved to be insufficient, they doubled it once again.

A case like this would seem to confirm the idea that the multiplicity of plans and its inherent diversity inevitably create fertile soil for spontaneous creativity: they say that one zigzag or blind alley more or less in the planning labyrinth won't make any difference.

And we ourselves, looping about in the corridors of the administration of the Odessa Railroad, running from service to service, from department to department, were able to see how complicated the planning labyrinth is. And we ran in a search for an answer to that same seemingly simple question: "Did the Odessa division fulfill the 1982 plan or not?"

And here is the picture that finally became clear from the figures obtained in the railroad's administration. The Odessa division fulfilled the loading plan under the annual, or, as they still call it, the production and financial plan at a level of 100.3 percent. Under the state plan, or, as they still call it, the plan summing up the monthly plans--at 98 percent, and under the technical plan at 96.7 percent.

So we arrived back where we started. The question is still the same, did the Odessa division of the Odessa Railroad fulfill the plan or not?

7045

CSO: 1829/218

RAIL SYSTEMS

IMPROVED GONDOLA CAR TO BE PRODUCED

Moscow ZHELEZNODOROZHNIY TRANSPORT in Russian No 12, Dec 82 pp 56-58

[Article by O. B. Kamayev, deputy main designer of the Urals Railway Car Construction Plant, and Yu. O. Fayershteyn, chief of the department for reliability of the planning and design office of the Main Administration for Railroad Cars of the Ministry of Railways: "A Gondola Car of Improved Construction"]

[Text] In 1978 the Urals Railway Car Construction Plant imeni F. E. Dzerzhinskiy, together with the All-Union Scientific Research Institute of Railroad Transportation (VNIIZhT), on the instructions of the Railroad Cars MA began with the planning of a new 4-axle all-metal gondola car of unified construction with solid front walls. In the course of the work on the technical manufacturing instructions consideration was given to the experience of the operation of gondola cars in the railway network which were built previously by the Urals, Kryukovo and Zhdanov Railway Car Construction Plants, and use was also made of the statistical material collected by the service for the reliability of railway car operation.

It was taken into account, for example, that one of the important shortcomings of the previous design of the model gondola car was the inadequate reliability of the front doors. The outward flexure of the doors was frequently observed in operation, as well as the deformation of the lower, side and middle stiles of the alignments of the doors, wedge-shaped clearances between the alignments and the corner uprights, the failure of the upper and lower bolts, and even the tearing off of the doors. At the same time, the doors in the gondola car were required for cases of the transportation of caterpillar and wheeled equipment and freight of long dimensions. Thanks to the fact that there has been a sharp increase in the level of the mechanization of the loading of piece-freight, the dimensions of saw-timbers and other long-dimension freights have been standardized and the possibility has developed of building gondola cars without front doors with increased dimensions to the outside the length of the body.

The new design envisages two variants of the frontwalls of the gondola car. According to the first of them, the flat panelling of 5 millimeters, encased in the frame along the perimeter, was supported by two vertical elements of rigidity (uprights) of an omega-like shape. According to the second variant, the panelling was supported by two horizontal elements of rigidity (with middle and lower belts), which are also manufactured from an omega-like section, and two vertical semi-uprights which join the end-beam with the lower horizontal belt.

During 1979-1980, static and impact tests were conducted on gondola cars with solid front walls, with a gondola car with front walls manufactured according to the second variant being subjected to static tests, and gondola cars with walls manufactured according to both variants being subjected to a collision test.

The basic goal of the static tests consisted in the determination of the state of stress and the assessment of the strength of the elements of the body and the frame from the effect of the calculated operational loads according to the operation modes I and III, repair loads imitating the hoisting of the empty and loaded car up to the full carrying capacity of the frame by one and two jacks with their placement at various points, as well as loads imitating the unloading of the gondola car in a car dumper. The strength was estimated by means of comparing the magnitude of the summary stresses from the effect of the loads of every calculated mode with the magnitudes of the stresses being permitted. The results of the static test showed that the strength of the elements of the body of the gondola car satisfies the requirements of the norms for the calculation of the cars for strength.

The collision tests, in the course of which the state of stress of the elements of the frontwalls of the gondola cars was assessed, were conducted at the experimental ring of the All-Union Scientific Research Institute of Railroad Transportation.

Table 1. Basic Technical-Economic Indicators of the Gondola Car, Model 12-119

Carrying capacity, in tons	69
Size of body, in cubic meters	76
Container, in tons	22.5 ± 2%
Load from axles to rails, taking into account possible overload, in ton-force	23.25
Linear load, in ton-force/meter	6.57
Wheelbase of the gondola car, in millimeters	8,650
Length at the axles of the clutch of the automatic coupler, in millimeters	13,920
Container coefficient	0.346
Outside width at the uprights, in millimeters	3,134
Height from the level of the rail heads to the upper binding, in millimeters	3,491
Calculated speed, in kilometers per hour	120

In so doing, the experimental gondola cars, loaded to their full carrying capacity, by turns were set placed against the support of a testing hill and a loaded tank weighing 85 tons was rolled at them. The speed of the collision was changed from 4 to 12 kilometers per hour. A total of 135 collisions were conducted with the gondola car with vertical uprights (first variant of the wood wall), and 117 collisions--with the gondola car with horizontal belts (second variant).

On the basis of the experiments conducted, the following conclusions were drawn. At a longitudinal force of 250 ton-force on the automatic coupler (the speed of a collision of about 8 kilometers per hour), the maximum stresses in the frontwall with vertical uprights arise in the mid-section of the upper

belt and in the straps joining the upper belts of the front and side walls. Taking into account the static load, they are equivalent to respectively 2,545 and 2,816 kilograms/square centimeters. In the front wall with horizontal elements of rigidity, the maximum stresses arise in the middle belt and, taking into account the static load, come to 2,330 kilograms/square centimeter, and in the straps--1,980 kilograms/square centimeter. Thus, for both design variants, the summary stresses from static and impact loads do not exceed those being allowed, which are equal to 3,100 kilograms/square meters. At speeds of collisions of 10-12 kilometers per hour and an impact force of 300-400 ton-force, no damages and residual deformations of the elements of the front walls were discovered. The front wall built according to the second variant has a strength which is 1.1 to 1.5 times as great as the standard strength. For this reason, proceeding from the future conditions of operation, the gondola car with horizontal reinforcement elements and semi-uprights is recommended for serial production.

In order to preserve the continuity of the technological process of the manufacture of the new gondola car in plant and also to provide for its maintainability in conditions of operation, the basic elements of the frame of the body and the side walls, with the exception of the corner uprights, were borrowed from the previously produced gondola car model 12-532. The unification of construction must guarantee the complete interchangeability of all basic removable elements of the new gondola cars with the analogous parts of the gondola cars produced by the Urals and Kryukovo Railway Car Construction Plants, as well as reduce the list of spare parts for the repair enterprises.

The basic purpose of the new trunk line gondola car is the transportation of freight which does not require protection against atmospheric precipitation, predominantly non-powdered, bulk freight, as well as stack and piece freight with their fastening to the body for the prevention of shifting during the movement of the car or maneuvering work. The design of the body of the gondola car envisages the possibility of unloading it in car dumpers, as well as through open hatches in the floor or through the top with the use of the appropriate materials-handling machines.

In conformity with the model requirements of the Ministry of Railways, the gondola car is equipped with footboards and handrails, which are necessary for the safe work of the switchmen, as well as with outside and inside stairs, arranged diagonally at the side walls from the inside and outside sides of the body. Furthermore, brackets are envisaged for the hinge-plate of train signals, devices for the fastening of freight inside the body, brackets for the installation of wood uprights, outside devices for the roping of soft covers for the freight, allowing also for the possibility of tying down the freight. To increase the maneuverability of the gondola car during the execution of loading and unloading operations, fastening devices have been welded on the outside of the body for pulling the car with the aid of a winch.

The parts of the side walls of the body, the frame, the front walls, and the covers of the unloading hatches in the floor--in order to increase resistance to corrosion, have been manufactured from low-alloyed, highly-weldable steel of the 09G2D or 10KhNDP grade. This made it possible to make broad use of

automatic and semi-automatic gas-shielded arc welding, as well as resistance spot welding, which guarantees a high level of production and working conditions and the highly-productive automated manufacture of the joints of the gondola cars in conveyor lines with high quality of the execution of welding operations.

A new gondola car, model 12-119, has fallen within clearance limits: In terms of body--01-T (8d), in terms of truck--02-T (9d) All-Union State Standard 9238-73. The new gondola car is operated on trucks of the type TsNII-KhZ (model 18-100) according to the All-Union Standard 9246-79), equipped with automatic pneumatic brake with a standard air distributor and automatic regulator of brake transmission, a standard parking brake and automatic coupling devices with the SA-3 automatic coupler of the non-tightlock type and the Sh-2-V absorption apparatus.

The body of the gondola car is all-metal, welded from rolled, roll-formed and extruded profiles, which make possible the broad mechanization and automation of the manufacture of the units of the gondola. The proportion of such profiles in the construction comes to more than 80 percent. The internal measurements of the body are as follows: Length--12,700 millimeters (instead of 12,126 millimeters in the case of the gondola car with front doors), width--2,878 millimeters, height--2,060 millimeters. In so doing, the volume of the body increased from 73 to 76 cubic meters. The side wall represents upright-welded construction, consisting of the frame and metal sheathing (10KhNDP steel) made from die-rolled stock. The parts of the side wall, except the side uprights, were adopted from gondola cars built in earlier years. The corner uprights are made in the form of plates manufactured from 8 millimeter thick plate. The lower binding of the side walls is made from angle iron measuring 160X100X12, and the upper binding has a box section and is welded from a roll-formed section of 6 millimeter thickness and angle iron. The sheathing is welded in overlap to the bindings.

The face wall is a frame to which the sheathing is welded. The frame consists of an upper and lower binding, two horizontal belts, two semi-uprights, which are made from roll-formed and rolled sections, and two side uprights made from channel No 12. The sheathing of the wall is made from two smooth plates (09G2D or 10KhNDP steel) joined the full height in overlap. All elements of the front wall are joined through electric arc welding. The wall is welded to the end beam in the place of the joint of the lower binding with the upper plate of the beam. In addition, to the frontal plate of the end beam are welded the faces of the side uprights and semi-uprights. The combination of the horizontal belts with the semi-uprights substantially increased the rigidity of the front wall which takes on the load from the freight being displaced during the collision of cars.

The most crucial assembly of the body is the place where the front wall is joined with the side walls. To increase strength, the joining of the upper bindings of the front and side walls is done with thickened welded plates in the place of the inside junction. In addition, the side vertical uprights are welded from two sides to the corner uprights.

The frame of the gondola car, which also has welded construction, consists of a backbone beam and adjacent end, coupling-bolt and spaced beams. All ele-

ments of the frame, except the end beams, are borrowed from the model 12-532 gondola car. The end beams have a box section with the reinforcement of rigidity through ribs. In the frontal plate of the beam of 7 millimeter thickness, the 16 millimeter-deep seat is punched out for the installation of the socket of the front stop of the automatic coupler. The thickness of the upper plate has been increased to 8 millimeters.

The backbone beam consists of two Z's 310 millimeters in height, joined to each other through welding, and an I-beam 190 millimeters in height, welded to the Z's through automatic welding. At the point of junction of the backbone beam with the coupling-bolt beams, boxes on pivots are welded which reinforce the place under the pivot and link the vertical walls of the backbone beam to each other. The coupling-bolt beam is a construction of a box section of variable height with the upper plate of pan-like form, two vertical plates and a lower plate. The pivot is fastened to the lower plate, the Z's and the box on pivots. The spaced beam consists of a vertical plate, a lower plate and an upper plate having a pan-like form, and is a welded construction of an I-beam section of variable height. The joining of them with the side wall is done with the aid of straps.

Of interest is the construction of the point of attachment of the upright to the frame, which previously caused quite a few failures in operation. The upright is welded to the lower binding angle iron and reinforced with a strip.

The 14 covers of the unloading hatches, which are attached to the frame with hinges, in their closed state form the floor of the car. Every hatch has an opening to the outside of 1327X1540 millimeters in size. In open state, the covers of the hatches assume an inclined state at an angle of 31° , except those located over the trolleys (23.5°) and the brake cylinders (27°). This makes possible the self-unloading of the freight beyond the limits of the wheel span. The covers of the hatches are made with obliquely-placed brackets. The introduction of cast welded obliquely-placed brackets instead of riveted ones, which with the aid of welding join the side bindings with the front ones, have more than doubled the strength of the covers of the hatches. All hatch covers are manufactured in accordance with a set of unified technical instructions, which guarantees their complete interchangeability. In closed state, the covers of the hatches are held in place by a bolt mechanism. To make it easier to raise the hatch covers when they are closed, they are equipped with special torsion bar devices. The design of the places for the fitting of the hatch covers were done analogously to the model 12-532 gondola car.

The new model of the 4-axle gondola car with doorless front walls has gone successfully through comprehensive official acceptance tests and by decision of the interdepartmental commission has been accepted for serial production.

COPYRIGHT: Izdatel'stvo "Transport", "Zheleznodorozhnyy transport", 1982

8970

CSO: 1829/224

RAIL SYSTEMS

DEVELOPMENT OF NEW 'SANDWICH' REFRIGERATED BOXCAR

Moscow ZHELEZNODOROZHNIY TRANSPORT in Russian No 12, Dec 82 pp 59-60

[Article by M. G. Berenshteyn, candidate technical sciences; V. I. Gamirov, candidate technical sciences; S. A. Sapozhnikov, candidate technical sciences; R. N. Glinkina, engineer; N. V. Kireyev, engineer; A. S. Senchilo, engineer: "Refrigerated 'Sandwich' Type Boxcar"]

[Text] Transport service for the agricultural industrial complex is one of the important tasks of the Food Program. Specifically, to resolve this in rail transport, the improvement of the design of the boxcars fleet used for transporting agricultural loads and produce is planned. Under these conditions, the further improvement in the design and betterment of the operational characteristics of refrigerated boxcars intended for transporting perishable goods is of great importance.

The creation of "sandwich" type refrigerated boxcars is a characteristic trait in the current stage of development of isothermic rolling stock. These differ primarily from other boxcars in that their external and internal linings and heat insulation comprise a single unit. Polyurethane foam is primarily used as the chief thermal insulator. It is foamed on site and turns into the load-bearing element inside the sandwich structures. As compared with other isothermal boxcars, the "sandwich" boxcars have improved technical-economic indicators, and particularly a reduced container weight, greater load capacity, higher heat-resistance qualities and air-tightness. However, the main advantage of these boxcars is that their body requires almost no maintenance for the entire service life--28 years.

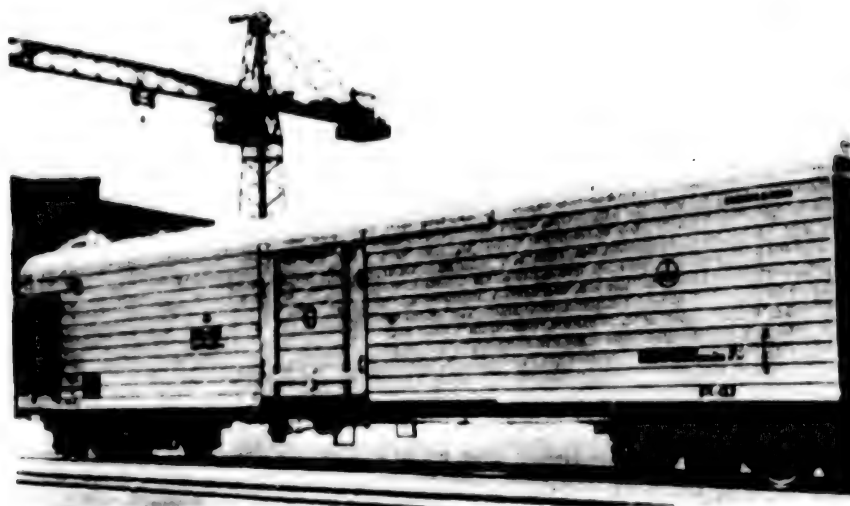
The first experimental example of a domestic "sandwich" refrigerator boxcar was built by the production union of the Bryansk Machine Building Plant (PO BMZ) and tested and approved by the State Interdepartmental Commission. The production of the boxcar was preceded by a large complex of scientific-research and experimental-design work conducted by the union in association with the All-Union Scientific-Research Institute on Boxcar Construction, the Ural Department of the All-Union Scientific-Research Institute on Railroad Transport (VNIIZhT), the All-Union Scientific-Research Institute on Synthetic Resins, the Bryansk Institute on Transport Machine Building, and others. The experience of foreign countries was utilized in the creation of the boxcar, particularly that of the GDR. The comparative parameters of the new boxcars

and cargo cars of 5-car RS-4 type refrigerator sections built by PO BMZ and ZV-5 type built by the Dessau Boxcar Construction Plant (GDR) are presented in table 1.

The panel type construction has been adopted in the "sandwich" refrigerator boxcar as the most efficient and most adaptable for manufacture. For purposes of maximal utilization of the existing equipment and tooling in the manufacture and servicing of the boxcars during their operation, all the basic external dimensions of the experimental model have been taken to be identical to series produced refrigerator boxcars of traditional construction. The boxcar has a cargo compartment and one machine section, separated by an insulated partition. It is equipped with refrigeration-heating devices, circulation units, and electrical supply and control systems. The working order of all the design elements and equipment is ensured at coupling speeds of up to 7.5 km/hr and at isolated impacts at a speed of 12 km/h⁴. All the equipment in the experimental boxcar has been standardized with the equipment on series-produced cargo cars manufactured by the production union of the Bryansk Machine Building Plant. In connection with this, let us examine in greater detail only the specific features in the boxcar's body design.

The body of the boxcar is all-metallic, assembled of 10 pre-manufactured panels: a roof, a block frame comprised of a floor and side walls (4 pieces), doors (2 pieces), a front wall and a partition. The outside metallic lining is made of 2mm thick 10KhNDP steel with a corrugate span of 250 mm, while the inside lining is made of 2mm thick AMg6M aluminum-magnesium sheet alloy with plated corrugates. The metal construction of the body is reinforced by a system of frame cross-piece elements, wall supports and roof arches which, when welded together, form closed rib frame supports. The insulation used in manufacturing the panels is grade PPU-17N polyurethane foam (for spraying) and PPU-309T polyurethane foam (for pouring). Special coatings are used to increase the corrosion resistance and to ensure reliable adhesion of the insulation to the lining. The thickness of the various boxcar enclosures is indicated in Table 2. It should be noted that the given thickness of the boxcar enclosures (weighted average over surface) practically corresponds to the optimal figure, determined according to the minimum incurred expenditure for cargo transport.

The operation of principally new technological equipment was needed for the production of the bodies. Thus, a universal bench was developed for making the side and front wall panels, the partitions and doors, as well as benches for the manufacture of the block frame--the floor and roof. All these were equipped with attachments for installing, compressing, drawing, heating and maintaining the temperature on the panels at a level of $36 \pm 50^{\circ}\text{C}$, and compensating for the pressures which build up during foaming of the insulation up to 300 cPa. The assembly of the body was done a bench used in the assembly of series produced cargo car bodies.



Experimental model of a "sandwich" refrigerator boxcar

The insulation of the panels was done in sections with the aid of spraying and pouring installation models SN6-12 and GN63-12 manufactured by the GDR. The main mass of the insulation material was poured into the panels, with the formula and pouring technology selected in such a way as to fully exclude the heat thermal deterioration of the plastic foam during foaming in panels of relatively great thickness. The sprayed layer was applied only to reinforce the partition elements and seal the compartments, as well as to increase the rigidity of the metallic flooring and the outside roof lining. The panels manufactured by this method were assembled into the body by welding. The assembly recesses at the panel joints were insulated by additional pouring of polyurethane with the aid of a spray gun device.

Table 1

<u>Parameters</u>	<u>Basic parameters of refrigerator cars</u>		
	<u>"sandwich"</u>	<u>RS-4</u>	<u>ZV-5</u>
Length along coupling axes, m	22.16	22.16	22.08
Structural speed, km/hr	120	120	120
Tolerable axle load, kN	216	216	216
Tare, t	39	39	42
Load capacity, 5:			
nominal	46.0	46.0	46.0
useful	44.4	41.36	37.0

Volume of cargo area, m ³ :			
full	148	140.4	133
useful	120	111.8	100
Tare coefficient:			
for nominal load capacity	0.848	0.848	0.913
for useful load capacity	0.878	0.943	1.135
Nominal load capacity utilization coefficient	0.965	0.899	0.804
Full volume utilization coefficient	0.811	0.796	0.75
Heat exchange coefficient, W/(m ² · K)	0.28	0.30	0.31

Table 2

<u>Type of enclosure</u>	<u>Thickness, mm</u>	
	<u>Total</u>	<u>Insulation layer</u>
Side walls and doors	160	156
Front wall	180	176
Partition	180	157
Roof	180	176
Floor	200	149
Average thickness over entire boxcar	176	159

The experimental "sandwich" refrigerator boxcar has passed comprehensive testing. Thus, in the course of strength testing the car was subjected to the action of vertical load totalling 1050 kN uniformly distributed over the area of the floor, to compression while empty by forces of 1000, 2500 and 3000 kN, to the combined action of vertical load totalling 500 kN and the container mass weight, to expansion by forces of 1000 and 2500 kN, as well as to impact testing at co-impacting speeds of up to 12 km/hr.

A comparison of the maximal stresses at the characteristic points of the metal constructions of the experimental and series-produced boxcars showed that the stress in the test car was 15-20% lower, which indicates a significant reinforcing effect by the insulation of the sandwich constructions. The results of the impact tests showed that the stresses were significantly below tolerable

values in the sections studied. No changes in the structure of the boxcar were found after the tests.

The thermotechnical and energy-refrigeration tests of the boxcar also yielded positive results. The experimentally determined average value of the heat transfer coefficient comprised $0.237 \text{ W/m}^2\text{K}$ ($0.204 \text{ kcal/m}^2 \cdot \text{hr} \cdot \text{K}$) with an average geometric enclosure surface of 237.9 m^2 . The air expenditure through the enclosures with excess pressure of 49 Pa turned out to be equal to $16.8 \text{ m}^3/\text{h}$, which testifies to the good air-tightness of the body. During simulation of the computed thermal load on the boxcar with consideration for the operational factors (aging of the thermal insulation, deterioration of air-tightness, action of solar radiation, etc.), all temperature conditions were achieved in the boxcar that were required by the technical specification: obtain a minimal temperature of -20°C at an external temperature of $+40^\circ\text{C}$, cooling non pre-refrigerated cargo to a temperature of $+4^\circ\text{C}$ in a time period of less than 48 hrs, etc.

The "sandwich" refrigerated boxcar has also successfully passed the operational tests conducted under the technical supervision of VNI ZhT. The work time coefficient for equipping the experimental boxcar turned out to be 20-25 percent lower than on the series-produced boxcars.

The interdepartmental commission gave the "sandwich" boxcar the highest quality rating. Its widespread application in transporting perishable cargo will yield a significant technical and economic effect.

COPYRIGHT: Izdatel'stvo "Transport", "Zheleznodorozhnyy transport", 1982.

12322
CSO: 1829/221

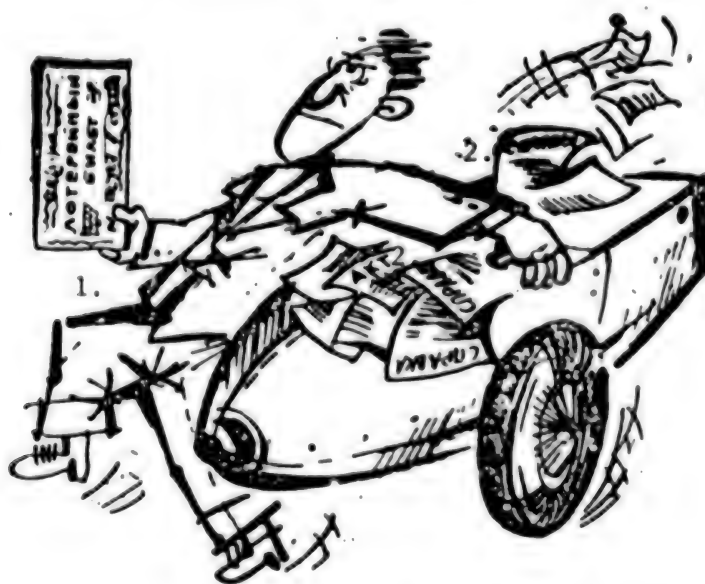
RAIL SYSTEMS

RAIL SHIPPING PROCEDURES CONFOUND LOTTERY WINNER

Moscow GUDOK in Russian 10 Mar 83 p 3

[Article by V. Vital'yev: "The Fickleness of Fortune"]

[Text]



3. Рис. Д. Бараб-Тарле.

Key:

- 1. Lottery ticket
- 2. Documents
- 3. Drawing by D. Barab-Tarle

Comrade I. N. Skripnichenko from the village of Zolotarevka, Stavropol Kray, recently had great luck. He won an IZh YuK-4 motorcycle in the money-goods lottery, complete with side car. Here one would think he would believe in his lucky star and calm down. But Ivan Nikolayevich wanted to claim his prize, and that's how it all started.

September 23, 1982, they informed him from the Izhevsk center of Posyltorg [Office for Parcel Trade] that his prize motorcycle had been unloaded at Ipatovo station on the North Caucasus Railroad line. The lucky Ivan Nikolayevich arrived there 15 November by his own devices, hoping to make his way back on his own wheels. And he actually received the wheels.... Well, really only one...and without a motor.... In short, instead of a motorcycle with side car, he got a side car without motorcycle. And instead of riding home on his prize, Comrade Skripnichenko had to push his prize home himself.

But that didn't comfort Ivan Nikolayevich. No, he couldn't be satisfied merely to get some use from his motorcycle side car--to carry things home from the store, or, let's say, to refit it as a child's bed--he wanted the motorcycle, period. He sent an official commercial document on non-delivery of the motorcycle and a receipt for its shipment to Rostov-on-Don to the administration of the North Caucasus Railroad, and he soon received a letter from them requiring him to provide a certificate from the store from which the motorcycle was purchased as well as some other papers. "How can this happen to me," the unfortunate lucky man asked in his letter to the editors. "They know darn well at the administration that I won the motorcycle and didn't buy it in a store. Where will I get a certificate?"

What can we advise the reader? Just one thing--to send to Rostov a clean sheet of paper instead of the certificate so that the railroad administration can clearly answer on it what they have done with the prize. And further we would like to wish that next time our man wins a baby carriage. Instead, he will probably receive his motorcycle.

9194

CSO: 1829/202

RAIL SYSTEMS

CONDUCTORS USE PASSENGER COMPARTMENTS FOR STORING POTATOES

Moscow GUDOK in Russian 16 Jan 83 p 3

[Article by T. Pigareva: "How Are You Fixed for Potatoes?"]

[Text]



Key:

- 1. For Potatoes
 - 2. Tashkent-Moscow
- Drawing by D. Barab-Tarle

For the conductors of car #2, train #185 (Tashkent-Moscow), traveling 30-31 October of last year, there was no problem in the procurement and storage of vegetables. They bought potatoes at the stops and stowed them in all of the compartments in the containers designated for personal items. All of this took so much of their time and effort that they were unable to clean up the car even once. At the same time, they were joyously celebrating their cargo handling successes in the service compartment with a drinking session, after which, at exactly midnight, they started to run through the car and knock on all the compartment doors: one highly fatigued friend had disappeared....

By the way, they didn't wake anyone up. The lights were burning in all of the compartments. And they were on because...there were cockroaches crawling all over the car. The passengers dared not to co-exist with them in the darkness. "In 20 years of work in transport, we have not ever seen such a mess," Comrades V. Gorin and V. Vrachnikov, who were passengers in Car #2 of train #185, wrote to the editors.

In connection with this, we propose that all of the participants and all interested persons and organizations admire this mess, in cartoon form.

9194

CSO: 1829/202

RAIL SYSTEMS

WORKERS FAULTED FOR LARGE PETROLEUM PRODUCT LOSSES

Baku VYSHKA in Russian 25 Mar 83 p 4

[Article by K. Babyev, VYSHKA correspondent: "Fuel Oil Lakes or How Hundreds of Tons of Petroleum Products Were Lost at Akhmedly-Nalivnaya Station Due to Poorly Thought-Out Organization of Labor and Primitive Technology"]

[Text] Those who get to the railroad station for transfer of petroleum products in the vicinity of the old village of Akhmedly will first of all be struck by the large puddles of oil. They stretch along the tracks and loading platforms where the tank cars are filled. A little bit to the side, a lake has already formed in which hundreds of tons of petroleum products mixed with water and dirt are lost. All around, the ground is saturated to the limit with the fuel oil. It is difficult to believe that such a mess is possible, because the question of conserving that which is recovered by oil field workers and processed at refineries is so critical. But here, judging from the numerous official documents compiled by fire prevention workers, the daily losses are close to 10 tons of petroleum products.

The losses in gasoline, crude oils and fuel oil are the fault of the heads of two facilities, the Akhmedly-Nalivnaya station of the Baku division of the railroad, and Shops #5, 6 of the industrial-commodities office (PTK) of the republic's Minneftekhimprom [Ministry of the Petroleum Refining and Petrochemical Industry]. At one time, a joint operating plan for renovation of railroads and loading platforms, the system for catching spilled petroleum products, etc., was confirmed by the management of the Azerbaijan Railroad and the Ministry of the Petroleum Refining and Petrochemical Industry. This plan has remained on paper. The losses are not diminishing.

This is what is happening through the fault of the railroad workers. Twenty tons of transformer oil leaked out onto the rails from tank car #7560239 due to a faulty valve. About 10 tons of motor oil leaked from tank car #7353697, and from tank car #7324099, all 56 tons of furnace fuel oil leaked out. By no means all incidents are recorded, especially during the night. In the words of filling operators B. Masimov, V. Kuznetsova and A. Tumanyan and others, leakage from defective tank cars is a typical phenomena. Some days there may be leaks from 2 or 3 tank cars.



End of the Work Day and the Tank Car is Still
Empty

Key:

1. Petroleum

Drawing by V. Tatarintsev

What is the reason for ChP [extraordinary occurrences] such as these? This is what we were able to find out. A. Ramazov and V. Akopov, valve mechanics at the station, carelessly repaired the tank car valve and no one checked their work. In the second instance, the motor oil leak was noticed by #6 shop foreman M. Mekhtiyev, and he requested that the valve mechanics on duty (he didn't know their last names) take action. And they, having circled around the tank car, left without having eliminated the leakage. In the third instance, when the fuel oil emptied completely out of the tank car, the station managers were also unable to name the guilty parties.

It is the responsibility of the station master on duty to find the guilty parties, check the work of the mechanics and maintain order. And this is how they treat their responsibilities at times. On one of the days, during the time that F. Dzhafarov was on duty at the station, tank car #7359795 started to leak after having been filled. An official document was drawn up, but Dzhafarov refused to sign it. And this is why. Before bringing the tank car up to the loading platform, he was obliged by directive to check the working condition of the valves and all other components personally, each one of them. It is categorically forbidden to load a faulty tank car. But he didn't check it, apparently having decided to make his task easier, and now he doesn't acknowledge his guilt. It is apparent from everything that station master T. Babayev also tolerated such a low level of industrial discipline.

As we see, in all instances of petroleum product loss through fault of railroad workers there was a single cause--lack of responsibility along the entire chain from tank car repair to the time it was brought to the loading platform. At the Akhmedly-Nalivnaya Station, they were not even trying to compensate for the cost of the petroleum products by the guilty parties. They are actually taking consolation in the cynical saying "Where one fills, there are spills."

There is another type of loss at the station to which workers of the PTK filling shops are a party as well as the railroad workers.

Filling operator Z. Vanyants, standing on top of the tank car shouts, "Hey, stop the pump! Quick!" Several minutes later she jumps back from the mouth of the car, from which oil has started to flow with a gurgling sound.

"That's the way we work," B. Malinin, filling shop brigade foreman summed up with bitterness. "While you're trying to shout loud enough to be heard, it has overflowed."

Vanyants filled 17 tank cars in a row, and each time it was the same thing: a shout and an overflow. While filling each tank car 100-200 kilograms of petroleum products were spilled out, the result of primitive organization. One is first of all struck by how poorly thought out the communications between the fillers and the pump operators is. This is the picture here: the filler hollers into the station office, which is not near the loading platform. In the booth, they pick up the phone and call the pump station and convey the filler's command. They timed it with a watch: from the time of the filler's command until it was carried out, 4, 5, 6 to 10 minutes and more passed. In a word, the time value is not constant, and it is difficult to adapt to when he must give the command to stop the filling. It is also necessary to fill the tank cars to order, otherwise the consignee will levy a penalty for short-loading. In order to fulfill their demands, it is necessary to overfill it. No one inquires strictly concerning overflow. And who are they going to ask? The operator? The pump station operator? The operator at the telephone?

The workers who are doing the filling have been put under the most difficult of conditions through the fault of the railroad managers and managers of Minedtekhimprom. Instead of modern means for signaling, measured start-up and for stopping the pumping units, they have been supplied with the tools of their grandfathers. The question of measured dispensing of fuel has been resolved at any filling station. It is unforgivable that at the filling station operating with dozens of tons of fuel products to be dispensed, nothing has been done in this direction as yet for practical purposes. The question has to be asked--how long will these losses at the Akhmedly station, which are totally unjustifiable, continue? Let us remind you that every day about 10 tons of petroleum products are lost here.

RAIL SYSTEMS

RESISTANCE TO MOSCOW RAIL CAR REPAIR INITIATIVE

Moscow EKONOMICHESKAYA GAZETA in Russian No 9, Feb 83 p 3

[Article by D. Valentinov: "Industrial Enterprises--Assisting Railroads"]

[Text] According to data of 1 February, about 60 percent of the enterprises of the country that have the technical capabilities of repairing rolling stock have concluded agreements with railroads for the repair of cars and containers. In January these enterprises repaired 34,600 cars and containers, which is 18,200 more than in the preceding month.

The Moscow CPSU Gorispolkom and the party committees of oblasts that serve the Moscow Railroad are continuing to do a large amount of organizational work. This railroad has concluded 1,160 agreements with enterprises for the repair of cars and containers.

The initiative of the Moscow workers has been most actively spread in Gorkiy, Leningrad, Perm, Chelyabinsk, Sverdlovsk, Yaroslav, Kuybyshev, Novosibirsk, Kemerovo and a number of other oblasts, and also at enterprises of the Ukraine, Belorussia and the Baltic republics.

An example of a businesslike, creative approach to the dissemination of the initiative of the enterprises of the capital is the work conducted by the Gremachev ore enriching combine, where the enterprise constructed a track for current repair of the cars, and the Gorkiy Railroad gave this combine a Donbas machine for mechanizing the repair of the cars. The cars are repaired by a comprehensive brigade made up of 18 people. They repair up to 20 cars each day here.

At the Chelyabinsk pipe rolling plant a separate track has been singled out for repair. It accommodates 18 cars and is equipped with a machine of the Donbas type and the corresponding technological fittings. In January they repaired about 800 cars here. With the help of specialists from the Chelyabinsk division of the Southern Ural Railroad, the plant repairs not only the beds, doors and hatches of the cars, but also certain parts of the automatic coupling mechanism. To manufacture these parts they use rolled metal wastes, which previously went for scrap metal. In order to maintain the rolling stock during loading and unloading of cargos, the enterprise uses gantry and magnetic cranes with special grasping attachments.

Mining workers of the Vostsibugol' association participate actively in repairing the cars. Enterprises of the association are also constantly helping railroad workers to clean the cars of residual cargos.

A number of plants of Sverdlovsk Oblast--the Sinarskiy pipe plant, the Verkh-Isetskiy metallurgical plant and others--have included indicators for the repair of cars in their annual socialist commitment, and they are fulfilling them successfully.

But the necessary measures for active dissemination of the initiative of the Moscow workers have not been taken everywhere. This work is particularly slow in being carried out at enterprises of Azerbaijan, Armenia, Kazakhstan, and Moldavia, and enterprises that serve the Baykal-Amur, Far Eastern and Transbaykal Railroads.

Certain enterprises of the USSR Ministry of Ferrous Metallurgy, the USSR Ministry of the Coal Industry, the USSR Ministry of Procurements, the USSR Ministry of the Timber, Pulp and Paper, and Wood Processing Industry, a number of ministries of the machine building industry and the construction materials industry have not concluded agreements for the repair of railroad cars and they also refuse to repair them. For example, commitments for the repair of cars have not been documented with agreements at the Kuznetsk, Western Siberian, Novosibirsk, Nizhnyy Tagil, Kommunarsk, Makeyevka and Chelyabinsk metallurgical enterprises, the Karagandaugol' association, the Chernorechensk cement plant, the Kharkov tractor plant, the Novorossiysk Oblast grain products administration, the Gomel agricultural machine building plant, the Arkhangel'sklesprom and Uralmash associations, the Uralasbest combine, the Ivanovo worsted and haberdashery combine, and others.

The ministries and departments in conjunction with party and soviet agencies must undoubtedly step up the work in the labor collectives for more extensive dissemination at the enterprises of the initiatives of the Moscow workers for repairing cars and containers.

11772

CSO: 1829/208

RAIL SYSTEMS

FURTHER DEVELOPMENT OF RAIL CAR REPAIR INITIATIVE IN MOSCOW AREA

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 1 Mar 83 p 1

[Article by V. Gordin and B. Yakovlev: "The Cars Are Being Put Into Commission"]

[Text] To provide for good repair of each car and container that leaves the Moscow Railroad center--this is the initiative which 11 leading enterprises of the capital presented at the end of October of last year. This initiative was approved by the Moscow CPSU Gorispolkom. It was recommended that all Moscow enterprises that have railroad sidings provide for the repair of the rolling stock with their own forces.

Four months have passed. How is this movement developing?

A senior master of the railroad shop of ZIL, A. Ariskin, having looked at the cars that were to be loaded, whistled. And there was reason for his indignation --frankly, the cars looked terrible. On one of them the floor had broken through, on another the door was barely hanging on, and on a third it looked as if the end wall were about to cave in . . .

"These are the kinds of cars we have to put back into commission," said the master.

"You are afraid to look and see what has to be done," the shop chief, V. Deykin, enters the conversation.

The renovation of rolling stock through one's own forces is nothing new for the automotive plant workers. They have a fairly large fleet of cars--260. So they have both experience and skilled specialists.

There was a time when they thought at the plant that the cars belonged to the Ministry of Railways and so let the ministry take care of them. But this position of the outside observer worked like a boomerang for the automotive plant workers as well--because of the lack of cars the shipment of prepared products was delayed. And then they decided to repair the cars even at their own expense, and it would still be more advantageous than interrupting deliveries. And so a specialized section appeared for renovating the cars. They worked practically under field conditions--directly on the sidings.

Now the enterprise has created a large specialized shop for industrial repair of rolling stock. Here they will work by the ZIL method, on a large scale and on a stable industrial basis. This will make it possible to do all kinds of current and medium-range repair of the cars.

A typical detail is that the production workers who repair the cars have become more interested in causes for their breakdown on their own sidings. It turned out that at the Karacharov machine plant, one of the reasons was an inefficient system for packing and securing the cargos. The system was revised and more modern containers and packets were used. This produced an appreciable result. Putting elevator doors in packages, for example, made it possible to load on an open car not one elevator set, as before, but two. There was a great advantage: more than 400 cars were released for shipping other cargos, idle time was cut in half, and the protection of the cargo improved.

It is remarkable that the solution to what would appear to be a purely technical problem also brought about positive moral changes. Direct participation of the production workers in the repair of the cars radically changes their attitude toward the rolling stock that comes into the plant: they are more careful with it and observe more strictly the policy for loading and unloading.

Three neighboring machine tool building enterprises that have the same sidings--Krasnyy proletariy, imeni Sergo Ordzhonikidze and Stankokonstruktsiya--have interesting experience in cooperation.

The enterprises have joined their forces. It has become possible to specialize in work that is performed taking into account the specific features of each plant. One engages in renovation of wood panels, another--welding operations, and a third--does finishing work. In turn, the railroad workers of the Kanatchikovo station which serves the plant has committed themselves to providing for prompt delivery of the cars and allotting the materials necessary for their repair. The initiative of the Moscow workers is gathering force: About 500 industrial enterprises and construction organizations of the capital have supported the initiative of the leaders of the movement for repairing rolling stock with one's own forces. Almost 6,500 cars have already received a second life.

This is how this undertaking is evaluated by the deputy chief of the main car administration of the Ministry of Railways, P. Yemanakov:

"The initiative of the Moscow workers has gone far beyond the capital," he said. "The initiative has been taken up by the Sverdlovsk, Dnepr, Lvov, Donetsk, Southern Ural and other railroads. I wish to emphasize that the undertaking is not only economically important, but also carries immense educational force and is creating a strong basis for establishing a more thrifty and economical attitude toward the cars and containers in places where they are loaded and unloaded."

Even the first steps show that weighty results have been achieved. But there have also been new problems related primarily to adjusting the economic mechanism for cooperation, increasing the reliability and efficiency of supply and financial ties and the wages of the brigades which stimulate reducing time periods and improving the quality of the repair work.

Managers of industrial enterprises are bothered by the question of loading the repair brigades. For each pair of hands is accounted for. At the ZIL, for instance, the car turnover is great. And how is it at enterprises where only a couple of cars come in each day and they do not always need repair? Not only production workers, but also railroad workers should be concerned about planning renovation work.

The norms for idle time of cars are rigid and one cannot include repair time in them. This means that special normatives are needed. And it goes without saying that the cars and containers repaired by the enterprise must be sent out on the first trip loaded with products from the same plant, factory or association. It would be good to legitimize this "right to the first trip."

It is clear that the initiative of the Moscow enterprises does not relieve railroad workers of all concern for repair of the rolling stock. Production workers have taken on responsibility for current repair. But medium-term and capital repair, which are directly related to traffic safety, must remain the responsibility of the railroad workers. The enterprises expect them to provide methodological assistance and efficient provision with the necessary specific materials.

11772

CSO: 1829/208

RAIL SYSTEMS

MOSCOW METRO CONSTRUCTION DEFECTS NOTED

Moscow GUDOK in Russian 1 Feb 83 p 2

[Article by Yu. Grachev, head inspector for the quality of construction and assembly work of the Main Subway Administration: "Constructing With Excellence, Constructing for the Ages"]

[Text] Everyone has long been accustomed to thinking that the subway is the most reliable, the most convenient and, if you will, the most beautiful kind of transportation. And this is the case. But in order to remain on the level of the best in the world, the subways must first of all be constructed with high quality.

But what is the situation now? Let us say frankly that it could and should be better with respect to many parameters. Subway construction, as a unified branch, extensively applies prefabricated elements. But they are not being installed on a high enough level--sometimes there are ledges, warps, and gaps that exceed the normatives. Specialists know that these violations are reflected in many indicators of construction designs, particularly in the operation and the suitability for repair.

Second, at many construction projects structures built of solid concrete and reinforced concrete, as a rule, are of poor quality. Some of them have such defects as brittle seams, separation of the concrete and exposed fittings.

Third, the level of leak-proofing operations in underground subway structures is low. As a result, leaks form in the tunnels and in the stations, and they can cause no small amount of damage. These inoffensive looking streams harm the construction designs and equipment, and damage costly facing material. The harm begins even in the first two years of operation. There are cases of serious deformations of the finishings of the tunnels, when the water brings dirt inside the drive structures.

One of the reasons for the appearance of defects in construction is the fact that managers and construction organizations are not very demanding when it comes to observing rules for performing operations, existing norms, instructions, orders and other normative and management documents which are published, as a rule, by the construction organizations themselves.

The second reason is the lack of control over the quality of the designs and materials at the construction projects. This leads to overstocking the construction project with substandard and poorly manufactured items.

The third and perhaps one of the main reasons is the lack of principled and strict author's supervision of the construction.

Because of a number of circumstances the planning institutes have ended up under the jurisdiction of the contractor, that is, the ministry of transport construction. It would not seem that this should change the attitude of the designer toward his brainchild. Logic says that a person who has spent a large amount of time, effort and imagination on creating a design would very zealously make sure that it is carefully executed. In the event of deviation from the design or the appearance of a defect in construction the representative of the author's supervision is obligated (and has the right) to take the most decisive and strict measures to eliminate these. But in fact it is fairly easy to allow violations, and the client must live with these violations permanently.

We have become accustomed to the fact that new subway lines are put into operation ahead of schedule and with an evaluation of "excellent." But in recent years the quality of the construction of subways, alas, has begun to deteriorate. In 1982 new projects of the Leningrad and Kiev subways were accepted by the state commissions with good evaluations, but for the construction and assembly and hydro-insulation work done on the projects of the Kiev subway the evaluation was only satisfactory. One must say that this fact has already attracted the constant attention of Glavtonnel'metrostroy.

Next in line is the beginning of permanent operation of the Serpukhov radius of the Moscow subway. Mosmetrostroy is trying to put it in operation ahead of schedule. The operations workers not only welcome this intention, but are also helping. The subway construction administration has already been provided with practically everything necessary for the installation of the equipment. But a preliminary inspection of the facilities that have been completed showed that the quality of construction and assembly work cannot satisfy the requirements for operation.

The construction-assembly and hydro-insulation work, the designs for in situ concrete and reinforced concrete, and the filling in of underground structures have been done at a low level, and they are basic projects which cannot be corrected either in the time remaining before startup or in the period of operation. Special concern is caused by the poor quality at projects being carried out by SMU-10 and SMU-15 of Mosmetrostroy. In order to prevent this, the managers of the subway construction administration must apparently visit the construction sites more frequently.

Subways are intended for many decades of operation and some of their structures are becoming monuments of architecture, such, say, as the Moscow Lermontovskaya and Kropotkinskaya stations of the very first section, and they are being carefully protected by the operators. But what will today's construction workers leave to future generations? Protect your honor, subway builders!

And here is what is surprising. Construction organizations do not take advantage of the right to make complaints against suppliers of construction materials and designs which is granted to them by the "provisions concerning deliveries of products for production and technical purposes." As a result of this liberalism the suppliers "dump" substandard products on the subway construction workers. For example, at construction sites of Mosmetrostroy the overwhelming majority of iron tubing produced by Lentrubit does not meet the established technical specifications.

This situation is no longer tolerable. There is now a need to take decisive and effective measures. I suggest that one should begin with the organization at enterprises of Glavtonnel'metrostroy intake quality control over products that are delivered and the submission of complaints to the manufacturers.

One of the most effective measures is to enlist the public in the struggle for the quality of the construction of subways. Here it is necessary to step up the work of public inspectors. The nucleus of this organization should be the best workers, engineering and technical personnel and people who are completely imbued with a feeling of being a master and intolerance to such negative phenomena as a careless attitude toward the public good, negligence, lack of discipline and irresponsibility.

11772

CSO: 1829/204

RAIL SYSTEMS

PLANS FOR MOSCOW METRO EXPANSION REVIEWED

Moscow MOSKOVSKAYA PRAVDA in Russian 1 May 83 p 2

[Article: "The Next Station . . . "]

[Text] One can judge from the mail the degree to which Moscow residents are interested in the prospects of the development of the subway. The following people asked to discuss the future of this most convenient kind of transportation: T. Skiba, A. Mel'diyanov, I. Kuznetsov, V. Stepashkin, S. Aplachanov and many other readers. Our correspondent visited the Metrogiprottrans institute where plans are created for new underground routes. Here is what they said.

One of the next future construction projects of Metrogiprottrans is the Timiryazev line. Fifteen kilometers of new underground mainline will be laid from the Borovitskaya station to the northern region of the capital. This is gratifying. The route is long and therefore it is intended to put it into operation in several stages--going from the center to the periphery. The first section is the largest one: the Chekhovskaya station and the tunnel from it to Borovitskaya. But its startup will enable passengers to transfer immediately from two lines--the Gor'kovsko-Zamoskvoretskaya and the Zhdanovsko-Krasnopresnenskaya.

The second section begins from Chekhovskaya. Three subway stations will be constructed here: Tsvetnoy Boulevard, Novoslobodskaya and Savelovskaya. The route will proceed further from the Savelovskaya station to the north. The following stations are being planned: Timiryazevskaya, Dmitrovskaya, Petrovsko-Razumovskaya, Vladykino and Otradnoye.

The well of trunk No 834 in Kozitskiy Lane was built more than 10 years ago, when the Pushkinskaya was being started. A couple of years later the collective of SMU-7 built a second station through this trunk--Gor'kovskaya. The young collective of SMU-14 is now in charge of Kozitskiy Lane, and the Chekhovskaya station is being built across the well. And here too, according to its notes, transfer tunnels are being built. The design of the Chekhovskaya station is of the column-pylon type. From the underground vestibule there will be an exit to Strastnoy Boulevard.

During the summer of last year subway builders of tunnel detachment No 6 appeared in the region of Petrovskiy Boulevard. They will have to build a transfer tunnel from Chekhovskaya to Tsvetnoy Boulevard. At the next station, Novoslobodskaya, they will construct a transfer center for the ring line. And the work is already in progress.

The Savelovskaya station links another railroad station of the capital, the last one, to the subway line.

Two variants of designs have been developed for the Petrovsko-Razumovskaya and Timiryazevskaya stations. From the Petrovsko-Razumovskaya station the route of the Timiryazev line (if one looks at the second variant) rises up and in the region where it crosses the Malaya district road at the Vladykino platform it rises to the surface. It is intended to construct the Vladykino station in the region where the route crosses the district railroad, to the west of the Vladykino platform. The final point of the Timiryazev line is one of the densely populated residential areas of the northern part of Moscow--Otradnoye. The station will be constructed at the intersection of Severnyy Boulevard and Dekabristov Street.

Even this year the subway will go to Chertanovo. The new Serpukhovskaya line will go through three regions of the capital. Seven stations will be opened up on it: Serpukhovskaya, Tul'skaya, Nagatinskaya, Nagornaya, Nakhitinskiy Prospekt, Sevastopol'skaya, Chertanovskaya and Yuzhnaya. And within a year the underground mainline from Serpukhovskaya will extend to the center, to the Lenin Library. Two stations are being constructed here--Polyanka and Borovitskaya--with a transfer center to the Kirov line.

When all 15 kilometers of the new underground road from Borovitskaya to Otradnoye are laid, under the 12th Five-Year Plan, the Serpukov line will be joined to the Timiryazev.

In the near future the Zamoskvorets line will be laid from the Kashirskaya station to the south--into the region of Orekhov-Borisov and further to Brateyevo. The length of the route is 9.5 kilometers. The line is to be introduced in two stages: in 1984 the Kantemirovskaya, Lenino and Orekhovo stations will be opened. And a year later--the Domodedovskaya and Krasnogvardeyskaya.

The Orekhovo station on this line will be especially elegant. It is being constructed on one of the unique corners of Moscow--next to Tsartsynskiy Park, where the architect Bazhenov worked. The structure is not standard and the elements of its design are not standard. The central hall of the station will remind one of a cupola. The above-ground vestibule of the station is also unusual in form and large in area--1,700 square meters. There has never been such a vestibule on the Moscow subway line. But the original forms and the large dimensions of the structure are not an architectural luxury. Its immense and beautiful designs are requirements of today's subway.

In 1985 subway builders will give Moscow residents another station in the center of the capital--the Tret'yakovskaya on the Kalinin line. It will be possible to transfer from the Kalinin to the Kaluga-Riga and Gorkiy-Zamoskvoretsk lines.

Under the 12th Five-Year Plan the blue trains will go to Teplyy Stan and Yasenevo. A new route is being laid from the Belyayevo station. Its distance is 6.6 kilometers. The startup of the line is planned in two sections: first Zoopark and Teplyy Stan, and then the next stations: Yasenevo and Bittsevskiy Park. The Zoopark station has a single arch. It is being constructed near the future

Moscow Zoo, on the intersection of Profsoyuznaya and Ostrovityanov Streets. Teplov Stan is being constructed on the turn from Profsoyuznaya Street to Novoyasenevskiy prospekt. The Yasenevo station will be constructed in the center of a residential area. It is intended to make it elegant and festive. It will have an exit to Tarusskaya and Yasnogorskaya Streets--at their intersection with Novoyasenevskiy prospekt, where it is planned to build a large trade center. The fourth subway station, Bittsevskiy Park, is to be constructed in the region of the Solov'inyy thoroughfare.

11372

CS 00 1829/202

RAIL SYSTEMS

LACK OF RAIL CARS CAUSES PIPE SHIPMENT DELAYS FROM LENINGRAD

Moscow GUDOK in Russian 31, Mar 83 p 3

[Article by O. Nosov, VECHERNYY LENINGRAD, L. Lavrova, MORYAK BALTIKI, G. Chizhenkov, OKTYABR'SKAYA MAGISTRAL', and B. Yurasov, GUDOK: "Blockages on the Docks"]

[Text] On the sixth dock of the first region of the Leningrad maritime trade port today there is practically not a single free "corner." And a good half of the territory is crowded with pipes that are waiting to be sent on the railroad.

The same situation has arisen in the Leningrad maritime port, on this largest transshipment base of sea-railroad. Here is a checklist of the workers of the Avtovo station of 22 March: they owe the port an overall total of 657 open cars. The shipment of pipes at the neighboring Novyy Port station is also considerably behind the plan. It is no wonder that by this time about 100,000 tons of pipes have accumulated on the docks here.

GUDOK has reported that February was one of the successful: both the port workers and the railroad workers fulfilled the assignment for shipping and dispatching large-diameter pipes to the consumer. In March, unfortunately, there were arrears and construction workers of the Urengoy-Pomary-Uzhgorod failed to receive a total of more than 3,000 tons of pipes.

The main reason was the shortage of rolling stock, especially at the Avtovo station which turns out to be the main dispatcher of these products.

"Last month we handed over platforms from our own loading so that they could be used for shipping pipes," says A. Deryabin, chief of the third region of the port, which serves the Avtovo station. "But in March we do not have the opportunity to do this: the railroad is reserving almost all of our platforms for rolling stock to be used for other clients."

Yes, we know: in the Leningrad transportation center there is always a shortage of rolling stock. But still there are more than adequate reserves here. This is shown by the following figures: only one-fifth of the enterprises that have sidings send cars for loading operations within the norms for idle time. The rest of them, alas, do not fulfill this indicator.

And another thing. When we were in the port (during the day of 23 March), we turned our attention to the open cars loaded with pipes that were standing on this same sixth dock of the first region. It turned out, for example, that open cars Nos 648, 1744, 635 and 5227 had been there since night--more than 12 hours.

"I called the maneuvering dispatcher of the Novyy Port station, A. Slobodkin, several times," complained the senior dispatcher of the first region, I. Bogdetskiy. "I told them to take away the loaded cars. But as you see . . ."

On the next day we called the port. We wanted to know if they had managed to remove these cars. And this is what we heard:

"They are standing there, just as they were."

The Novyy Port station workers explained the situation by the fact that they cannot manage to control the state of affairs on all docks. Therefore in order to accelerate the shipment of cargos they suggest leaving their representatives in the first and second regions of the port. Then, they say, it will be easier to exercise operational control over the movement of the rolling stock and the loaded cars. This makes some sense. But this problem for some reason has still not been solved. Yet it is time for the managers of the Leningrad-Vitebsk Division of the Oktyabr Railroad to stop talking about the shortage of rolling stock and begin practical utilization of existing reserves.

11772
OSU 1829/203

RAIL SYSTEMS

RAILROAD FAULTED FOR WINTER SHIPPING PROBLEMS IN URENGOY AREA

Moscow EKONOMICHESKAYA GAZETA in Russian No 12, Mar 83 p 18

[Article by V. Dubrovin (Novyy Urengoy): "The Narrow 'Gates' of Urengoy"]

[Text] Two years ago the first cargo train passed over the newly built 600-kilometer mainline from Surgut to the Urengoy gas condensate deposit. The working traffic of trains began here. And then after a year, having covered the 80-kilometer distance among the forest tundra, the construction workers arrived at Novyy Urengoy.

This was not only the achievement of the Tyumenstroyput' association, which managed to penetrate through impassable tundra and marshy swamps where it was necessary to construct a bridge or a culvert at almost every kilometer and to construct immense embankments. A new impulse was given to the assimilation of the largest gas and petroleum region, which has now received reliable transportation connections with industrial centers of the country.

The opening up of traffic on this line was invaluable for Urengoy, where there are no navigable rivers. It is not surprising that from the first days the load on the railroad began to increase and quickly surpassed that which was expected under the conditions of temporary operation. For each year it is necessary to ship to this regions millions of tons of construction materials, equipment and technical equipment for the construction of industries and cities as well as pipes for gas transportation arterials.

With the beginning of this winter's construction season, when the frost hardened the marshes, the flow of cargo to the north considerably increased. And here traffic jams have appeared at many stations of the division for temporary operation (OVE) of the Surgut-Novyy Urengoy Railroad of the Tyumenstroyput' association. Cars loaded with cargo have accumulated, including for the Tyumen section of the Urengoy-Uzhgorod section of the mainline.

It turned out that the recipients at the final stations of Farafont'yevskaya and Yagel'naya were poorly prepared for receiving and unloading large volumes of cargo. This pertains particularly to subdivisions of Glavurengoygazstroy (chief--A. Salivayko) and Glavzpsibzhilstroy (chief--I. Varshavskiy). In December, for example, an average of 100 cars were unloaded--half as many as arrived. In January-February they managed to increase this figure to 130 cars. They could have unloaded two or three times as many (the sidings were prepared

for this and sufficient technical equipment was concentrated there), but the problem of sending the cars to the unloading points became more critical here. The station tracks constructed on the Farafont'yevskaya line for the startup turned out to be clearly inadequate for rhythmic service for the loading trains. Moreover there were not enough steam engines or supplies of diesel fuel. They did not even have shovels in reserve for clearing the tracks of snow drifts, not to mention special technical equipment.

All these omissions can be attributed to the Tyumenstroyput' association, which did not devote enough attention to the division for temporary operation of the northern railroad. But one cannot remove responsibility from enterprises of ministries and departments that participated in increasing the cargo flow either.

Here it is appropriate to recall the joint measures earmarked for the winter period by four ministries (Ministry of the Gas Industry, Ministry of Construction of Petroleum and Gas Industry Enterprises, Ministry of Transport Construction and Ministry of Railways) for providing shipment of cargo in order to accelerate the startup of the main Urengo-Uzhgorod gas line. For example, the Ministry of the Gas Industry and the Ministry of Construction of Petroleum and Gas Industry Enterprises promised to allot 7,000 square meters of housing for the VPE workers. But they were in no hurry to fulfill their commitments, which had a negative effect on providing operations staff. The builders of the road did a good deal to increase the reliability of the main line. But there are still more than 10 temporary bypasses on the section from the Korotchayevo station to Urengoy, because of which the speed of the trains is sharply reduced.

Along with the Ministry of Railways the builders of the railroad are slow in solving problems of further development of station tracks at Farafont'yevskaya and Yagel'naya which would make it possible not only to improve the dispatch of loaded cars for Urengoy, but would also open up a free path for cargos to Nadym and the newly assimilated Yamburg gas deposits.

The greatest indifference to the new mainline is being displayed by the Ministry of Railways which is represented by the Sverdlovsk railroad administration. It promised turnouts, but did not deliver them on time, and did not take responsibility for serving the section up to the Purpe station with its locomotives.

There is no need to discuss how important it is for Urengoy workers to receive the necessary cargos precisely now, before the time of bad roads begins. For many of them can be shipped to the construction sites only during the winter. It is no wonder that construction workers here say that "a winter day provides them with a year of work." Therefore it is also necessary to open wider the railroad "gates" to Urengoy.

11.17.72
280 1529103

RAIL SYSTEMS

LAGGING RAIL TRANSPORT CONSTRUCTION DELAYS KATEK DEVELOPMENT

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 22 Feb 83 p 2

[Article by G. Fadeyev, chief of the Krasnoyarsk Railroad: "Blind Alley at Both Ends"]

[Text] To be sure, it does not happen that often: the rolling stock and electric locomotives are available, the coal has been mined in abundance, but the railroad personnel are unable to carry it in the necessary amounts--there is nothing on which to carry it. That is the situation today with carrying the coal of the KATEK [Kansk-Achinsk Fuel and Energy Complex].

I should note that up until this February the Krasnoyarsk Railroad was keeping up with the coal shipments. There was untapped potential, and we strove to make full use of it. And we achieved quite a bit. It is sufficient to say that since 1979, when the KATEK was built, the freight turnover of the stations Sharypovo and Dubinino, through which most of the freight passes, have grown nearly tenfold. But as the capacity of the mines has grown and with the sharp increase in the plan of "Krasnoyarskugleprom," the railroad has exhausted its capabilities. Especially since the all-union crash construction project requires an ever growing inflow of building materials, equipment and metal structural fabrications; after all, the new large open-pit mines "Berezovskiy-1" and "Borodinskiy-2," the Berezovskaya GRES-1, the country's largest, and in the center of the KATEK--the city of Sharypovo. It is quite obvious even today that the carrying capacity of the steel roadway has become the principal limit on the coal basin's development.

I do not preclude the surprised question: How could the coal basin have been developing without being coordinated with the external railroad facilities? Actually, comprehensive development of the KATEK was in fact outlined, including steel approaches to the coal, all the housing and consumer, social and cultural service spheres. Moreover, the problems of carrying the solid fuel and other freight of the economy were stated as specifically as possible in the well-known decree of the CPSU Central Committee and USSR Council of Ministers entitled "On Building the Kansk-Achinsk Fuel and Energy Complex." For instance, in the 11th Five-Year Plan 150-200 km of railroad lines were to be built every year and stations developed. But what has happened? Mintransstroy [Ministry of Transport Construction] is including in its own plan one-third of that volume, and even then it is regularly failing to fulfill it.

The situation is still worse with housing, facilities for social, cultural and consumer services, and utility mains. In recent years not more than 20 percent of allocations for these purposes has been used, although this is all part of a single complex near completion. Thus development of the steel road-
way has lagged behind the region's needs for several years.

What is the matter here? Why has the medal-winning trust "Krasnoyarsktransstroy," which at one time was well known throughout Siberia, as they say, driven the railroadmen and coal miners into a corner? This question was put directly and fairly at a recent meeting of the kraykom bureau of the CPSU to V. Yakushin, the trust's manager. Whereas in previous years we heard cheerful assurances from him that "the resources will be sufficient, we will overcome the difficulties, we will win out," now he has been forced to confess embarrassedly: "The trust's work force has to be practically doubled to cope with the volume of work at the KATEK." Speaking frankly, this insight is late.

We also went to talk to T. Gogichashvili, deputy minister of transport construction. I cannot reproach Tengiz Andreyevich for having altogether ignored our needs. At my request, for example, he immediately responded with respect to the most "crying" facilities at the basin. Having studied the situation last fall with construction of the second tracks on the Mezhdurechensk--Abakan line (the coal's outlet for Novokuznetsk), he agreed: "Yes, it has to be stepped up." That road was literally shuddering with traffic. He promised to send construction workers from Sverdlovsk. But the deputy minister had not had time to get back to Moscow when I learned: the replenishment is not to go to the Abakan zone, but they are taking people away from here. And under an altogether plausible pretext: "There are more important projects...."

There are many such examples. The construction trains are being driven from corner to corner instead of enlarging the collectives available in the zone of the KATEK and creating new subdivisions capable of satisfying the need of a region that is developing at a very fast pace. Where is this leading? To an alarming rate of assimilation of resources. In 1982, for example, the trust "Krasnoyarsktransstroy" did 15 percent less construction and installation work on the Krasnoyarsk Railroad than in 1980. If we add to this the trust's lag in development of external railroad transport under the appropriations of industrial enterprises, then it becomes as clear as day: there is nowhere else to go.

The declining trend was noted in good time and even at the end of the 10th Five-Year Plan attempts were made to right the list. The party kraykom held a conference involving the deputy ministers of transport construction and the coal industry at which all the questions of guaranteeing shipment of the coal were gone into in detail. But any change that has taken place has been very small. Later the same matters were taken up in sessions of the party kraykom's bureau, coordinating councils and conferences. Key officials of Mintransstroy promised on every occasion "to intensify, to correct, to make it up...." Afterward orders were issued, plans of measures were drawn up. But this was done, judging by all appearances, simply out of the desire at the moment to muffle the acuteness of the problems that had arisen. Isn't that the reason why the measures related to construction of the facilities for external

railroad transport at the open-pit coal mines are being carried out so creakily? Of the 24 points which were supposed to be carried out last year, only 11 were done.

Meanwhile the heaps of coal in storage areas at stations are growing and not infrequently catch fire. Lacking the development they need, the stations Sharypovo and Dubinino have been forced to accept and handle incoming trains selectively, and as a result hundreds of cars are languishing at the approaches. This is why the standing time of rolling stock at the enterprises of "KATEKenergostroy," for example, exceeds the allowed time fivefold or more.

I would have been gratified if they had furnished more cars to be loaded with coal in February than in January. But I was forced to call upon M. Shchadov, first deputy minister of USSR Coal Industry, to leave the volume of loading at the January level. The question of hauling coal from the Berezovskiy Open-Pit Mine was taken up in the party kraykom, and they came to the conclusion that because the necessary number of station tracks was lacking at the station Dubinino, the maximum loading should be 100 cars a day, that is, what we achieved in January. But Comrade Shchadov is worried only by one thing: moving the largest possible harvest from the KATEK field. Yet it is the first deputy minister, who approved the plan for mining and shipping of coal, who is responsible for adjusting the capabilities of the mines and the external approaches to them. Especially since the spur lines to the Berezovskiy Mine and the adjoining station Dubinino are facilities of USSR Minugleprom [Ministry of Coal Industry].

I think that I. Sosnov, minister of transport construction, is perfectly aware of the KATEK's role in development of Siberia's productive forces and the country's entire fuel and energy base. Ivan Dmitriyevich is properly informed about the state of affairs with the transportation arteries of this region. But why, then, is the necessary invigoration and desired change of affairs not being felt there?

It is time the comrades in Mintransstroy reassess their position in the light of what Yu. V. Andropov, general secretary of the CPSU Central Committee, said at the meeting with the Moscow machine tool builders: "It was stated at the plenum that this year is the crucial year of the 5-year period. To put it bluntly, we need to do what we did not do in the first 2 years and try to make up for lost time and create the conditions for normal operation in the last 1 years of the 5-year plan."

Exactly--create the conditions!

RAIL SYSTEMS

GUDOK CONDEMNS PREFERENCE FOR LOCAL INTERESTS AT PLAN EXPENSE

Moscow GUDOK in Russian 26 Apr 83 p 1

[Article prepared by GUDOK's department for traffic and freight and passenger operations: "The Empties Disposition Target Is Law!"]

[Text] Efficient operation of the transport conveyor is impossible without centralization, without the strictest observance of state discipline.

Comprehensive empties disposition, one of whose components is the transfer of empty cars from roads on which they have been unloaded to those on which they would be loaded, regulates and determines the efficient operation of rolling stock and fulfillment of the traffic plan. This is an axiom well known to any manager. In the network there is practically no such line that would receive any sort of subsidy of empties. Some need gondola cars, others flatcars, still others tank cars, and yet others boxcars.... Every team leader has experienced in his own case what it means for his collective for a neighbor near or far to be undisciplined and not to meet the targets for empties disposition. But not everyone demands that kind of discipline either from himself or his subordinates. Many, perfectly aware of their rights (give me everything I am supposed to have!), forget about obligations, do not say to themselves: I have to give!

Sometimes certain key officials simply undergo strange transformations.

Until recently A. F. Platonov held the post of first deputy chief of the main traffic administration. What a war he fought to enforce discipline in the disposition of empties, and how angrily he demanded that violators be punished! But then Anatoliy Petrovich became chief of the Azerbaijan Railroad--and literally he became another man. He has not been fulfilling targets for delivery of gondola cars--and that is enough. Perhaps he was unable to do so? Where, as a matter of fact, are those 340 empties to be found, if the operating fleet consists of 1,384 gondola cars "in all"? Above the allowance, to be sure, but these are only details. Incidentally, out of that number 319 are empty and 106 are carrying local freight. And turnaround time has increased to more than a day. So that every day the Azerbaijan Railroad is delivering 46 fewer gondola cars than it should. Fortunately they can do without them somewhere in the Dnestr, especially since Comrade Platonov is no longer responsible for the Dnestr line. He is responsible for his own railroad, and that is all.

takes up 77 gondola cars more than the allowance. Once again every day. Since the beginning of the month the road has been loaded with almost 2,000 extra cars.

But here is something else! The neighboring railroad--the Transcaucasian--is operating on a far larger scale. It has captured 3,500 extra gondola cars. And on the other hand it has delivered 1,300 fewer than it should have. The road's chief L. G. Vardosanidze, perhaps, would even have been glad to supply more, but where are you taking them? The operating fleet has only 92 empty gondola cars above the allowance which he himself needs. To be sure, there is an excess of nearly 1,000 carrying local freight, but they still have to be unloaded! If only they would empty themselves!

The nearest neighbor of these two roads is the North Caucasus. Not so long ago A. I. Yaroshenko, chief of the Rostov department, assured those attending a meeting of the collegium of the MPS [Ministry of Railways] that in his department they love the empties disposition. And that the North Caucasus Railroad has fulfilled, is fulfilling and will fulfill assignments for transfer of empties.

Actually it is fulfilling the assignment for gondola cars. But the one for boxcars? The railroad workers of the border stations of the Lvov Railroad, who have nothing in which to load extremely expensive imported freight, are waiting impatiently. They are waiting in vain. The North Caucasus Railroad already owes them more than 2,000 boxcars. One could understand if it had experienced a shortage of rolling stock. No, this railroad is actually swimming in cars. It has an abundance of everything. The surplus of boxcars alone in the operating fleet runs to 2,100! The empties alone number 256. There are 160 more cars carrying local freight than called for, and 320 fewer being unloaded. In addition, the railroad workers of the North Caucasus Railroad, who are excessively good managers, have set aside a reserve of more than 200 boxcars in case there is a need for them.

Not in vain, it seems, do they say that the man who is well fed does not understand the hungry man. F. M. Kotlyarenko, chief of the North Caucasus Railroad, is altogether unable to understand the urgent needs of G. A. Porokh, his counterpart in Lvov. Perhaps because he is located far from that railroad?

Well, the Southwestern is quite close to the western borders. But even this close neighbor has also proved incapable of understanding. With 1,330 boxcars above the allowance in its operating fleet, 346 of them carrying local freight, the road has been managing to deliver 62 cars a day fewer than it is supposed to. It is already short 1,550 cars. That is how it has managed to capture about 1,500 additional boxcars to carry its freight. In addition, it owes the Donbass more than 2,500 gondola cars.

Quite recently the first deputy chief of that railroad received a severe penalty for such "activity." Why is it that he has not drawn the necessary conclusions? Can it be that V. M. Yarchuk likes to furnish explanations in meetings of the collegium? Hardly. It seems the reason he is so fearless is that he is acting on an explicit instruction from the chief of the line B. S. Melnik. How otherwise could one account for such arrogance?

The situation is quite similar on the Southwestern Railroad. There are huge surpluses in the operating fleet: more than 900 gondola cars, more than 2,000 boxcars.... The turnover of both has slowed down, unloading has been poorly organized. The empties disposition targets, as in the past, are not being met. We have to assume that this is not unknown to A. S. Golusov, the railroad's chief.

If we look at the indicators of the operation of gondola cars on the Volga Railroad, the pluses are dazzling. To be sure, every one of them could be credited as a minus against the road. The operating fleet is plus 2,600, empties plus 400, local cargo plus 300, use of excess rolling stock plus 200, turnaround time of gondola cars plus 0.3 day. And just one minus: delivery of empties under the empties disposition order. Let G. Ya. Pisarev, the road's chief, explain if he can why when he has a daily surplus of 400 empties he cannot find 15 to fulfill the assignment?

The October Railroad and its chief A. S. Petrov have already been spoken about and discussed in all the conferences. He has in his fleet 3,100 gondola cars in excess--and thinks nothing of it! The road itself is not fulfilling the timber loading plan, and it is giving a flying kick to the neighboring Northern Railroad. One out of every three of these "surplus" cars is carrying local freight. As G. G. Galkov, deputy chief of the traffic department, explained officially to this paper, "the planned level has not yet been achieved because of unsatisfactory unloading by industrial enterprises." But shouldn't the traffic department be concerned about the organization of unloading?

The Siberian Railroad is unloading more than envisaged by the standard even though there is a great shortage of gondola cars in its operating fleet. Five loads! And the turnaround time of that rolling stock is lower there than assigned, and the loading target is being overfulfilled.... Presumably it is always praiseworthy to overfulfill it? Naturally, if it is done by tapping unused potential, but if it is done at the expense of neighbors....

The Dnieper Railroad itself is receiving gondola cars under empties disposition orders. Empties are also going through it to the Donbass. So the road exactly counts off everything it is entitled to, and the Donetsk Railroad gets what is left. Sometimes it is not ashamed to take a surplus; it has already appropriated 1,200 gondola cars belonging to others. Perhaps the situation altered the way out? Hardly; after all, the road is holding 2,186 gondola cars in reserve, nearly 1.5-fold more than it was supposed to receive under the empties disposition. Isn't this too luxurious a reserve for the present time? What do the road's chief A. A. Alimov and the heads of the main traffic administration think about this?

One might also talk about the clutching of flatcars on the Odessa Railroad (chief of the road I. S. Shevernayev), about the chronic unfulfillment of empties disposition targets by the Alma-Ata (chief of the road K. D. Kobzarev), about the decline of empties disposition discipline on the Gorkiy Railroad (chief of the road A. F. Basov). But probably we have given enough examples.

And here is the inevitable result of such flagrant lack of discipline. In the Donbass more than 3 million tons of coal have been piled up in heaps, and the underground mines have shut down. In Kremenchug there is nothing to load the celebrated KRAZ's into. The plan is not being fulfilled for the shipment of coal, timber, flux, ferrous metals, manufactured fertilizers, cement and a number of other very important freight items. Although the overall loading plan in April was surpassed by as much as 1.1 million tons. The numbers are there, but there is no quality; the loading plan is not being fulfilled by types of freight. And who needs the gross volume without quality?

Only now is it becoming an issue to fulfill the state plan for the entire list of freight. The state plan is law. No one is allowed to violate it. Yet it can be fulfilled only if empties disposition targets are strictly adhered to; there are no other possibilities. Anyone who ignores those targets must bear full responsibility for upsetting the loading plan.

Not a single chief of a station, department or service, not a single deputy road chief will dare to go against an order of the ministry, unless he has the tacit consent or explicit instruction of the chief of the road.

It is, of course, difficult for him sometimes to resist the numerous requests and demands that he supply cars for loading on his own road. They call from below, they call from above, they call from all sides: give us cars. How is one not to gratify his native enterprise, city or oblast, how is one not to honor the local interest? But often the local interest proves to be localistic, and it is no accident that these words have the same root. And localistic means detrimental to the general cause, detrimental to the interests of the state. Violating the assignments of empties disposition brings disorganization into the operation of the transportation system and results in failure to fulfill the state loading plan. That is why nonfulfillment of assignments for empties disposition must be regarded as a most flagrant violation of state discipline.

7045

CSO: 1829/215

PORTS AND TRANSSHIPMENT CENTERS

BRIEFS

MODERN TRANSPORT COMPLEXES -- Irkutsk -- The opening of annual navigation on the rivers of Eastern Siberia was marked by an important innovation. Transport complexes went into operation, which combined the crews of river vessels and loading machinery. Until this time the equipment operators and river workers worked according to a single flow chart, but had their own plans by which their work was evaluated. Now work evaluation and payment take place according to the quantity of goods transported. For example, such a complex is in operation in the Irkutsk region. It includes a powerful floating crane for loading construction materials, three cranes for unloading, four motorized vessels and eight non-motorized barges. Single project assignment and common interest in the final results of the work have had an effect on the production results. Significantly more cargo already has been delivered to construction industry enterprises than at the same point in the last shipping period. It has been decided also to use progressive forms of labor organization on Lake Baykal for transporting timber, petroleum products, and industrial and agricultural cargo for the builders of the Baykal-Amur Magistral and agricultural workers. [Text] [Moscow GUDOK in Russian 12 May 83 p 1] 9069

NEW MOORAGE OPERATIONAL -- Makhachkala -- A new moorage has entered operation in the petroleum harbor of the Makhachkala commercial seaport. This port is considered one of the oldest on the Caspian. Built by Peter the Great, it has become a major transport hub for the south of Russia, through which annually pass millions of tons of agricultural cargo. The sea gates of Dagestan are today experiencing a second youth. Construction is in progress. New moorages are being built and old ones expanded. The new moorage will increase the port's throughput capacity. [Correspondent A. Kazikhanov] [Text] [Moscow IZVESTIYA in Russian 19 May 83 p 1] 9069

HIGH CAPACITY TERMINAL OPENED -- Vladivostok -- The high capacity Vladivostok Seaport terminal has accepted its first ocean vessel for loading. Tens of thousands of containers destined for delivery to Magadan, Kamchatka and Sakalin will be handled here annually. The new moorage has modern equipment for transshipping large diameter containers. [Text] [Moscow VODNYI TRANSPORT in Russian 28 May 83 p 1] 9069

VOSTOCHNYY AUTOMATED CONTROL SYSTEM -- Nakhodka -- In the port of Vostochnyy a single automated control system for the transportation center has entered operation. In the first quarter, dock workers processed almost 150,000 tons of kindling, timber and coal more than during that period last year. The annual freight turnover of Vostochnyy is 4 million tons. Each day several hundred containers alone arrive here. The electronic dock worker easily handles this flow, fulfilling up to 70 various operations, including indicating on what floor to put the containers at the terminal. The operator needs only to dial the container number on the panel and the machine operator will then and there be told its location. [TASS Correspondent L. Vinogradov] [Text] [Moscow VODNYY TRANSPORT in Russian 9 Apr 83 p 4] 9069

CONTAINER TERMINAL OPENED -- Riga --The first line of the container terminal at the Riga commercial port reached design output ahead of schedule. From the moment of its start-up productivity tripled. The loading platform area was increased, the piers were extended 400 meters, and the railway tracks and crane roadway were lengthened. Powerful loaders process 120 containers per shift. The equipment has completely mechanized the technological loading processes and reduced to a minimum the layover of ships and railroad cars. This year the Riga port workers will process a record amount of cargo -- approximately 7 1/2 million tons. The container terminal will help deal with the sharp increase in freight turnover. Its construction is continuing. By the end of the year the amount of loading machinery will double and the piers will be lengthened. [Text] [Moscow VODNYY TRANSPORT in Russian 14 Apr 83 p 1] 9069

DIRECT RAIL-SHIP LOADING -- Odessa -- Ships are not detained at the moorages of the country's largest seaport complex for loading carbamide, which is operating at Yuzhnyy Port. Their layover has been reduced to just over one-fourth of the expected time. This was achieved by shifting to loading ships directly from the railroad car to the hold. At first it was planned to store mineral fertilizer arriving at the port, and then load it on motor vessels. But the collective at the complex made adjustments in the transport conveyer and suggested that it be loaded directly. A complex system of transporters was introduced, and the fertilizer "swam" through them from the cars directly into the ships' holds. A second conveyer line was created parallel with the first for packing carbamide in bags and loading it on motor vessels. Thus, two transport lines are in operation on the moorages, which permits two ships to be loaded or allows immediate loading on one ship of two product lines. Owing to the introduction of these innovations, the carbamide unloading complex reached design output much earlier than scheduled. Today approximately 10,000 tons of fertilizer are transferred here daily. This is almost double that initially planned. [Correspondent A. Belous] [Text] [Kiev PRAVDA UKRAINY in Russian 28 Apr 83 p 2] 9069

RIVER PORT UNDER DEVELOPMENT -- A new river port is being developed in the Daugava Estuary in Volder Bay. Powerful gantry cranes are being installed and loading platforms equipped at the moorages in the first cargo area. A circular asphalt divided highway leads up to the bank. The place selected for the new port's cargo area was not accidental; a powerful river complex is being developed here in the Daugava Estuary. A ship repair factory is already in operation, which superbly prepared the fleet for navigation in 1983, and at which barge building is being developed. Fitting out new moorages and assembling equipment is continuing. This year the Latvian river workers will handle more than seven million tons of agricultural products; almost two-thirds at the Riga river port. [Text] [Riga SOVETSKAYA LATVIYA in Russian 6 May 83 p 2] 9069

NEW BULK CARGO MOORAGE -- Vostochnyy Port, Primorskiy Kray -- Heavy-freight ships have moored at the new Vostochnyy Port moorage which specializes in bulk cargo. Formerly such cargo was processed at the Nakhodkin commercial seaport. However, deep-draft vessels could not approach its moorages, and therefore had to remain a long time in the roadstead, awaiting the reloading of cargo onto ships having shallower displacement. The entry into operation of the new moorage in Vostochnyy Port significantly speeds cargo processing and reduces the time that ships stand at anchor. [Text] [Moscow VODNIY TRANSPORT in Russian 8 May 83 p 4] 9069

GRAIN OFFLOADING COMPLEX OPENS -- Novorossiysk -- A new specialized complex for offloading grain from ships has begun operation in the Eastern Region of the Novorossiysk Seaport. It is based on two pneumatic loaders. Ten railroad cars per hour can be filled with grain. The method permits working in almost any weather, even in the strong winds which often occur in Novorossiysk. Even the smallest loss of grain is eliminated. A dust removal system helps in the struggle for environmental cleanliness. The loaders are equipped with a weighing device which eliminates the need for such operations as reweighing and monitoring already loaded cars. The complex is computer equipped. The operator can visually verify fulfillment of the computer program. A similar grain complex is under construction in the western Region of the port. [V. Bakulin] [Text] [Moscow VODNIY TRANSPORT in Russian 28 May 83 p 1] 9069

CSO: 1829/230

INTERSECTOR NETWORK DEVELOPMENT

TRANS-SIBERIAN CONTAINER SERVICE HANDLES MILLIONTH CONTAINER

Moscow MORSKOY FLOT in Russian No 4, Apr 83 pp 9-10

[Article by Ye. Bogolyubov: "Transsiberian Service"]

[Text] It was the end of September 1982, the period of the golden autumn in the Maritime Kray, when an event occurred in an eastern port which had long been awaited by all those associated with the loading, unloading, acceptance, shipment and transporting of cargoes on TSKS [Transsibirskiy konteynerniy servis; Transsiberian Container Service] -- the one millionth container passed through the port. It was delivered by the motor vessel Novikov-Priboy of the Far East Steamship Agency.

Let us recall the history of Transsiberian transport operations. The delivery of cargoes from Europe to Japan, in transit across the territory of the USSR, began even prior to World War II. Even then the advantages of this direction, as the shortest route between Far Eastern countries and Europe, were obvious. Compared to the traditional method for transporting cargoes by sea through the Suez or Panama Canals or around Africa, with the distance ranging from 20,000 to 27,000 kilometers, shipments via the Transsiberian route involved a distance of less than 13,000 kilometers. But during this period the shipments across the territory of our country did not occur on a very extensive scale as a result of the difficulties which arose in connection with the combined method for transporting conventional cargoes.

And later the war took place.

It was not until 1967 that transit shipments of cargoes via the Transsiberian route were resumed.

In March 1971 the motor vessel Kavalerovo delivered eight large cargo containers to Nakhodka from the Japanese port of Osaka.

This was a new undertaking for the Far Eastern Steamship Agency. There was a shortage of specialized ships and thus the containers were carried aboard ships not intended for this purpose, ships such as the motor vessel Kavalerovo which could accommodate only 56 containers, and also on reequipped ships such as the motor vessel Grodekovo, which carried up to 150 containers. Since 1973, the TSKS fleet has been augmented by the addition of specialized container carriers of the Sestroretsk and Aleksandr Fadeyev classes.

In 1975 the Japanese fleet commenced participation in TSKS shipment operations. Parity was established in 1980: four container carriers representing an overall container capability for 3,380 units commenced operating from both the Soviet and Japanese sides. The crews of the ships carry out their work on the TSKS lines in an efficient and harmonious manner, ensuring the timely delivery of cargoes.

Container terminals specially equipped for the processing of TSKS transit cargoes were established in Yokohama, Kobe and other Japanese ports.

The introduction of specialized container ships, the establishment of specialized cargo complexes and the organization of railroad routes which involved the use of specialized flatcars made it possible to increase sharply the volumes of container shipments, raising them from 2,000 in 1971 to 153,000 in 1981.

Here one should bear in mind the difficulties which confronted the port workers at Nakhodka and Vostochnyy, particularly the insufficient number of special railroad flat cars. Nevertheless the port workers succeeded in surpassing to a considerable degree the planned capability of the container terminals.

At the present time, the services offered by the TSKS line are being utilized by the owners of goods in more than 25 countries of Western Europe and the Near, Middle and Far East. The popularity of the TSKS led to the creation of a second transit line -- to Hong Kong (1972). A third TSKS branch -- to Manila -- was opened in early 1973. Shipments from Australia commenced in 1979. Cargo is being shipped to countries in southeastern Asia, Iran and Afghanistan. The possibility of organizing a new line -- to Mongolia -- is being examined.

The transporting of transit cargoes from Europe to Japan and other countries in the Far East and in the opposite direction is being carried out using all types of transport: maritime, railroad, motor vehicle, river and aviation. A Japan to Europe air bridge is in operation. Here the containers are being transported by powerful cargo aircraft of Aeroflot.

This then is what the TSKS looks like today.

While we were briefly reviewing the history of the establishment and development of the TSKS, the Novikov-Priboy container ship safely tied up alongside the passenger motor vessel Baykal. The latter vessel brought from Japan to Vostochnyy Port a large delegation of representatives of Japanese and western firms, as well as correspondents representing Japanese newspapers and magazines. The delegation included representatives of such companies as Dzheyro Container Transport, which accounts for 33 percent of the westward container shipments and 55 percent of the eastward container shipments, the Nissin and Yamasita Sinnikhon firms, each of which ships up to 10 percent of the containers and Transib and Nippon Express -- 7 and 5 percent respectively.

Representatives of such giants of Japanese industry as Mitsubishi, Hitachi and Honda are stationed at Vostochnyy. In all, 41 companies from five countries are represented here.

Brightly painted 40-foot containers stand out clearly on the upper tier aboard the Novikov-Priboy. On the first container there are 6 large number nines. This is the next to last container of the first million. The state flags of Japan, the USSR and the FRG are painted on it. Alongside the flags one sees some Japanese hieroglyphics, which have some collective meaning and at the same time signify a holiday, congratulations and a jubilee. The container belongs to the Japanese Yamasita Sinnikhon Layn Firm and will be delivered to the FRG.

The honor of placing its cargo in the one millionth container was extended to the largest Japanese shipping firm Dzheyro. It is a pioneer of the Transsiberian Container Service. Thus a pretty sight today is a container of this firm with six zeros painted on its side. The word "Sotra" stands out on the other side of the container. Such is the abbreviation in Japanese circles for the term "Soyuztranzit." Two links of a chain are seen in the center of the container; they symbolize the close business-like collaboration which exists between the TSKS partners.

The first container of the second million belongs to the Nissin Firm and will be delivered to Belgium.

At a meeting opened by the chief of Vostochnyy Port V. Vasyanovich, speeches were delivered by the deputy chairman of the Primorskiy Kray Executive Committee A. Zaychikov, the general director of Soyuztranzit A. Nazarov, the president of Dzheyro Container Transport T. Miyamoto and the chairman of the council of Japanese consigners T. Kobayasi.

The meeting came to an end. Powerful units placed four containers on special flatcars, to which they were automatically secured. The diesel locomotive sounded its whistle and the containers began their overland journey, stretching from the eastern to the western borders of our country. Their route -- to Vysoko-Litovsk, a border station at Brest. At Vysoko-Litovsk the best drivers of the Sovtransavto enterprise will transport them farther over European roads. They will be accompanied on their journey through Siberia and Europe by a Japanese camera man, whose task it will be to take snapshots of the movement of the containers "from door to door."

The holiday passed. Routine days filled with constant work and problems returned.

The chief of the Transit Department of Minavtotrans /Ministry of Motor Vehicle Transport/ I. Dzhegriy stated:

"An agreement has been reached between Mirmorflot /Ministry of the Maritime Fleet/ and Minavtotrans: using our own undercarriages and motor vehicles, we will transport three containers daily from Nakhodka to the airport at Vladivostok and place them alongside aircraft for further delivery by the aviators to Luxemburg. This is the first step. We are disturbed by the non-rhythmic availability of ships and freight cars and, it follows, containers. Failure to receive timely information as to when the containers will arrive and their eventual route often results in motor vehicle idle time and lowers the efficiency of our work."

The deputy director for trade of the Central Administration for International air Communications of Aeroflot N. Ivanenko stated:

"The joint air-maritime line Yokohama - Nakhodka - Vladivostok - Luxemburg is for the most part functioning normally. We ship three containers by air each day. Along the route the containers are not opened up nor are they subject to transshipment; they are delivered directly to the consignee. The length of time for delivery -- 10 days, with full protection for the cargo guaranteed. This type of transport operation is convenient and advantageous to all concerned. Aeroflot possesses the potential to increase these air shipments by several times. This is why we displayed interest in the proposal by the president of the Dzheyro Firm to carry out one flight daily carrying only the containers of his firm."

But, as is well known, the work of the TSKS is dependent upon the work carried out by many participants in the transport process. And so long as we lack a sufficient number of undercarriages, motor vehicles, cranes and so forth, we will be unable to carry out this proposal. Unfortunately, we are still encountering incidents wherein the aircraft are lying idle while awaiting the arrival of their cargoes.

The chief of the container and packaged shipments service of the Far East Railroad A. Dan'ko stated:

"We made preparations long ago for this one millionth container. At the same time, I feel compelled to note that Soyuztransit is not providing us with timely information on the arrival of the containers."

The obligations of the parties involved are set forth in the agreement reached between the MPS [Ministry of Railways], MFF [Ministry of the Maritime Fleet] and MVT [Ministry of Foreign Trade] within the TSKS framework and yet these obligations are not always being carried out in a timely or complete manner.

Efficiently organized collaboration among all those participating in the transport service will serve to guarantee that the transporting of the second million containers will require considerably less time than the first million.

COPYRIGHT: "Morskoy Flot", 1983

7026

CSO: 1829/191

EXPERIMENTAL SYSTEMS

'LIL0-2' PNEUMATIC TRANSPORT LINE CONSTRUCTION DELAYS FAULTED

Tbilisi ZARYA VOSTOKA in Russian 12 Mar 83 p 2

[GruzINFORM [Georgian SSR press agency] article: "Pneumatic Transport Problems Are To Be Solved Together" under the heading: "In the Permanent Commissions of the Supreme Soviet of the Georgian SSR"]

[Text] The so-called "LIL0-1" is the first-in-the-world pneumatic pipeline container transport installation for the transport of inert materials which was built in the Georgian SSR. Several years later construction was begun in the republic on a high-productivity pneumatic container transport system "LIL0-2". It is intended for the transport of inert materials in an amount up to two million tons a year from the Shulaversk and Imirsk quarries to Tbilisi. It promises to have a great economic effect.

Specifically, the length of the route becomes shorter by a third compared with the motor vehicle route, and the cost of transporting a ton of cargo is reduced by a factor of three. According to the estimates of specialists, placing "LIL0-2" into operation at designed capacity will make it possible to release 276 trucks and 1,323 workers of the servicing staff and to save 15,400 tons of fuel a year.

The yield which pneumatic transport guarantees is obvious - so stated the members of the Permanent Commission on Transportation and Communications of the Supreme Soviet of the Georgian SSR. Before discussing the question of the introduction of pneumatic container transport in the republic and the outlook for its development at their meeting, they visited Shulaveri and Marneuli where they became acquainted with the work on the first stage of the "LIL0-2" installation. The serious deficiencies uncovered by the deputation in the matter of its introduction and operation determined the direction of the conversation that took place at the meeting. It turned out to be specific and it essentially affected all aspects of the present composition and the further development of pneumatic container transport in the republic.

The Commission advised the Ministry of Land Reclamation and Water Resources of the Georgian SSR, which is responsible for placing "LIL0-2" into operation, to take every measure to complete its construction and also to eliminate the

faults which had been allowed in the construction of the first stage of the installation. Specific instructions were given to the State Committee of the Georgian SSR for Special Transport and the Systems for Its Automation which called for carrying out a complex of measures for the comprehensive development of pneumatic container transport up through the training of its personnel. The appropriate ministries, together with the republic Gosplan and the departments of Gruzgoskomspetstrans [Georgian State Committee for Special Transport], should study the need for the introduction of pneumatic transport for the transportation of national economy cargoes in those places where railroad and motor vehicle transport is inefficient, and, in this, they should consider improving the interaction of all forms of transportation.

Deputy B. Z. Barsukov, the chairman of the commission summed up the results of the meeting.

The deputy chairman of the Presidium of the Supreme Soviet of the Georgian SSR, V. M. Siradze, took part in the work of the commission.

9136

CSO: 1829/254

EXPERIMENTAL SYSTEMS

INDUSTRIAL ASSOCIATION TO OVERSEE WORK IN PNEUMATIC CONTAINER TRANSPORT

Moscow SOVETSKAYA ROSSIYA in Russian 24 Mar 83 p1

[Article about the "Transprogress" Association]

[Text] Bringing great importance to the further development and more widespread introduction into the national economy of the republic of continuous and new specialized forms of transportation, the Council of Ministers has obliged the ministries and departments, the Councils of Ministers of the autonomous republics, the krayspolkoms, the oblispolkoms, and the Moscow and Leningrad gorispolkoms, beginning in 1983, to provide in the composition of the plans for the development and disposition of industries of the national economy of the RSFSR and branches of industries, for the application of trunk-line piping systems for the hydraulic transport of coal and other substances.

The RSFSR Gosplan, the ministries, and departments of the RSFSR are specifying in the plans beginning in 1984, the volumes (in tons) of national economy cargoes - primarily fuels and nonmetallic construction materials - for transport by hydraulic pipeline, by container pipeline, and by belt-conveyor transport.

A republic industrial association for pneumatic pipeline container transport, "Transprogress" has been organized in the RSFSR Council of Ministers (Transprogress RSFSR). The association will provide for the fulfillment of scientific and technical, experimental design, and planning operations connected with the creation of pneumatic pipeline container transport systems and systems for the centralized vacuum collection of the domestic wastes of cities. It also will provide for the production and delivery of specialized equipment for systems of pneumatic pipeline container transport for quarries, housing and municipal communities, and internal plant transportation, and for its repair and adjustment.

9136

CSO: 1829/254

EXPERIMENTAL SYSTEMS

BRIEFS

PIPELINE TRANSPORT TEST - Leningrad became the first city in the country from which a number of industrial cargoes are being delivered underground by pipeline container transportation. Bitumen, sulphur, and wood chips are being transported in special packaging under pressure inside a 115-kilometer trunk line. Our trunk line, says the chief engineer of the Leningrad regional administration of petroleum product trunk lines of the USSR State Commission on Petroleum Products, S. N. Nikiforov, is still experimental. It is a part of an advanced system for the transportation of bulk cargoes which is contributing to important savings of labor, fuel, machine time, and rail cars. Over a year the pipeline saves 548,000 rubles in the conveyance, for example, of 71,600 tons of bitumen. Right now, performance tests are being conducted on the Leningrad pipeline under the most diverse conditions. [By D. Vladimirov] [Text] [Moscow SOVETSKAYA ROSSIYA in Russian 10 Mar 83 p 1] 9136

CSO: 1829/254

END

END OF

FICHE

DATE FILMED

July 15, 1983